

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

**14356-14400 PEARL ROAD
STRONGSVILLE, CUYAHOGA COUNTY, OHIO**

Draft Report: February 2011

Final Report: July 2011

Prepared for:

Cuyahoga County Department of Development
1701 East 12th Street, First Floor
Cleveland, Ohio 44114

Prepared by:



HWZ ENVIRONMENTAL
CONSULTANTS, LLC

**6105 Heisley Road ♦ Mentor, Ohio 44060
440-357-1260 ♦ Fax 440-357-1510**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
2.0 BACKGROUND	1
2.1 Physical Setting	1
2.2 Previous Assessments	2
3.0 METHODS OF INVESTIGATION	4
3.1 Soil Boring Installation	5
3.2 Monitoring Well Sampling	5
3.3 Limitations and Deviations of Phase II ESA Activities	6
3.4 QA/QC Sampling	6
4.0 FINDINGS	6
4.1 Geology	6
4.2 Soil Analytical Results	7
4.3 Groundwater Analytical Results	8
4.4 QA/QC Analytical Results	8
5.0 CONCLUSIONS	9

FIGURES

Figure 1: Site Location Map
Figure 2: Current Site Conditions
Figure 3: Soil Boring Location Map
Figure 4: Existing Monitoring Well Location Map

TABLES

Table 1: Summary of Soil Analytical Results
Table 2: Summary of Groundwater Analytical Results – Existing Monitoring Wells
Table 3: Summary of QA/QC Analytical Results

APPENDICES

Appendix A – Soil Boring Logs
Appendix B – Soil Laboratory Analytical Reports
Appendix C – Groundwater Laboratory Analytical Report

EXECUTIVE SUMMARY

During January and February 2011, HzW Environmental Consultants, LLC (HzW) conducted a Limited Phase II Environmental Site Assessment (ESA) of 14356-14400 Pearl Road, Strongsville, Cuyahoga County, Ohio (the Property). This study was conducted in accordance with HzW's proposal dated October 18, 2010, which was authorized by the Cuyahoga County Board of Commissioners (the Client) on November 18, 2010. The Phase II ESA study was conducted to evaluate subsurface conditions at the Property in accordance with HzW's Soil Sampling and Analysis Plan (SAP) approved by the United States Environmental Protection Agency (USEPA) on January 7, 2011, and HzW's Ground Water SAP approved by the USEPA on December 9, 2010.

Prior to the completion of Phase II ESA field activities, the Property was acquired by a new owner on January 24, 2011. As a result of the Property transfer, HzW was not able to complete all proposed Phase II ESA activities. Specifically, HzW was not able to complete the additional groundwater monitoring well installation as presented in HzW's Ground Water SAP and was directed by the Client to prepare a report based on the Phase II ESA activities completed to January 24, 2011.

The Property is located at the northwest corner of Pearl Road (U.S. Route 42) and Pierce Drive in Strongsville, Ohio. The Property is developed with one (1) multi-tenant commercial building that fronts Pearl Road and one (1) commercial building behind the multi-tenant building along Pierce Drive. The multi-tenant commercial buildings are vacant with the exception of one tenant space. Asphalt parking lots comprise the remainder of the Property.

Previous investigations were conducted at the Property by Atwell-Hicks Development Consultants (Atwell-Hicks). Based on the findings of the Phase I ESA, Atwell-Hicks identified five (5) "recognized environmental conditions" in connection with the Property including the former uses of two (2) on-site tenant spaces as dry cleaners, a former and current northern adjacent tenant space as a dry cleaner and the presence of foundry sand in the western and northwestern portions of the Property. As a result, Atwell-Hicks recommended conducting a Phase II Subsurface Investigation.

Atwell-Hicks initially conducted a Limited Phase II Subsurface Investigation in which concentrations of several chlorinated volatile organic compounds (VOCs) were detected in soil samples exceeding the Ohio Environmental Protection Agency's (EPA's) Voluntary Action Program (VAP) Leach Based Soil Values (LBSVs). Subsequent Additional Phase II Subsurface Investigation activities consisted of additional soil boring installation, groundwater monitoring well installation and soil gas sampling within portions of the multi-tenant building on-site. Concentrations of chlorinated VOCs were detected in soil in excess of VAP generic LBSVs. In addition, the detected concentration of PCE in one location at a depth of eight (8) feet below ground surface exceeded Ohio EPA's VAP Generic Direct Contact Soil Standards for commercial/industrial land use and construction/excavation activities. The detected concentrations of several chlorinated VOCs in groundwater samples from two monitoring wells exceeded Ohio EPA's VAP Generic Unrestricted Potable Use Standards (GUPUS). Concentrations of one or more VOCs were detected in soil gas samples. Based on the results of the indoor air modeling, Atwell-Hicks "determined that the VOC excess cancer risk calculated for the subject site is below the Ohio VAP target risk level of 1.0×10^{-5} but above the USEPA target risk level of 1.0×10^{-6} ." In addition, Atwell-Hicks indicated that the hazard index for commercial workers at the Property were below the Ohio EPA VAP and USEPA target hazard index.

During January 2011, HzW conducted Phase II ESA activities at the Property, which consisted of soil boring installation and sampling of existing groundwater monitoring wells. Subsurface materials encountered within the borings consisted primarily of clay with gravel and shale fragments. Discontinuous lenses of damp or saturated soils were encountered at the Property.

Soil analytical results were compared to the Ohio EPA's VAP single-chemical Generic Direct Contact Soil Standards (GDCS) for commercial/industrial land use and construction/excavation activity scenarios, and the generic LBSVs. Concentrations of several VOCs were detected in several soil samples. The detected concentrations of tetrachloroethene in two borings exceed VAP single-chemical GDCS for commercial/industrial land use; however, the depth at which these soil samples were collected was below the point of compliance for commercial/industrial land use. None of the remaining concentrations of VOCs detected in soil samples exceeded VAP single-chemical GDCS for commercial/industrial land use. Similarly, the detected concentrations of VOCs were below VAP single-chemical GDCS for construction/excavation activities. Concentrations of several chlorinated VOCs were detected in soil in excess of VAP generic LBSVs at several locations.

Groundwater analytical results were compared to the Ohio EPA's VAP GUPUS. Concentrations of chlorinated VOCs were detected in two existing monitoring wells. The detected concentrations of several VOCs exceed VAP GUPUS in the two monitoring wells. Groundwater flow direction was not established at the Property by HzW during the portion of Phase II activities completed. However, should groundwater flow direction correlate with regional topography, the potential exists for impacted groundwater to migrate off site and pose an off-site vapor intrusion risk.

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
14356-14400 Pearl Road
Strongsville, Cuyahoga County, Ohio
(H10013-11)

1.0 INTRODUCTION

During January and February 2011, HzW Environmental Consultants, LLC (HzW) conducted a Limited Phase II Environmental Site Assessment (ESA) of 14356-14400 Pearl Road, Strongsville, Cuyahoga County, Ohio (the Property). The location of the Property is presented in **Figure 1**. This study was conducted in accordance with HzW's proposal dated October 18, 2010, which was authorized by the Cuyahoga County Board of Commissioners (the Client) on November 18, 2010. The Phase II ESA study was conducted to evaluate subsurface conditions at the Property in accordance with HzW's Soil Sampling and Analysis Plan (SAP) approved by the United States Environmental Protection Agency (USEPA) on January 7, 2011, and HzW's Ground Water SAP approved by the USEPA on December 9, 2010.

Prior to the completion of Phase II ESA field activities, the Property was acquired by a new owner on January 24, 2011. As a result of the Property transfer, HzW was not able to complete all proposed Phase II ESA activities (specifically, the additional groundwater monitoring well installation as presented in HzW's Ground Water SAP) and directed by the Client to prepare a report based on the Phase II ESA activities completed to January 24, 2011.

The Property is located at the northwest corner of Pearl Road (U.S. Route 42) and Pierce Drive in Strongsville, Ohio. The Property is developed with one (1) multi-tenant commercial building that fronts Pearl Road and one (1) commercial building behind the multi-tenant building along Pierce Drive. The one- and two-story multi-tenant commercial building is vacant with the exception of the 14356 Pearl Road tenant space, which remains occupied by the Shrimp and Lobster Market. The commercial building along Pierce Drive is vacant. Asphalt parking lots comprise the remainder of the Property. Land use surrounding the Property consists of a contiguous multi-tenant commercial building to the north, the right-of-way of Pearl Road to the east with commercial properties further east, the right-of-way of Pierce Drive to the south with commercial properties further south, and residential properties to the west. **Figure 2** presents the current site conditions at the Property.

2.0 BACKGROUND

2.1 *Physical Setting*

According to the 1994 Berea, Ohio, quadrangle United States Geological Survey (USGS) 7.5-minute topographic map, the Property is nearly level with an elevation of approximately 930 feet above National Geodetic Vertical Datum (NGVD). The topographic map indicates that regional topography slopes to the northwest and west towards a series of intermittent and perennial streams, one of which is identified as Baker Creek. The *Surficial Geology Map of the Cleveland South, Ohio, 30 x 60 minute quadrangle* prepared by the Ohio Department of Natural Resources (ODNR) indicates that the Property is underlain by an average of 20 feet of Wisconsin-aged till. The Wisconsin-age till consists of an unsorted mix of clay, silt, sand, gravel and boulders that overly Mississippian-age sandstone and shale of the Cuyahoga Formation, Berea Sandstone and Bedford Shale groups.

The *Ground Water Resources Map of Cuyahoga County, Ohio*, and the *Geologic Map of Ohio*, both of which are published by the ODNR, corroborates the subsurface geology. According to the *Ground Water Resources Map*, groundwater underlying the Property is obtained from the Cuyahoga Group or Chagrin, Ohio and Bedford Shales. Aquifers that yield three (3) to ten (10) gallons of groundwater per minute may be encountered less than 30 feet below land surface. The *Geologic Map of Ohio* indicates that the bedrock underlying the Property consists of Mississippian-age sandstone, siltstone and shale of the Cuyahoga Formation. Bedrock topography, according to the *Bedrock Topography Map of the Berea, Ohio*, quadrangle published by the ODNR, is located approximately 915 feet above NGVD (approximately 15 feet below land surface at the Property) within the vicinity of the Property and slopes to the north.

2.2 Previous Assessments

Several previous investigations have been conducted at the Property by Atwell-Hicks Development Consultants (Atwell-Hicks). Copies of a Phase I ESA dated September 4, 2008, prepared by Atwell-Hicks, and an Additional Phase II Subsurface Investigation dated December 4, 2008 prepared by Atwell-Hicks were provided to HzW for review. A summary of each investigation is presented below.

Phase I Environmental Site Assessment Report for the New Prototype Banking Center, 14356-14400 Pearl Road, Strongsville, Ohio, Prepared by Atwell-Hicks, September 4, 2008

Atwell-Hicks conducted a Phase I ESA of the Property in accordance with the American Society of Testing and Materials (ASTM) Designation E 1527-05 and 40 CFR Part 312 (All Appropriate Inquiry). At the time of the Atwell-Hicks Phase I ESA, the Property was occupied by several commercial tenants including Shrimp and Lobster (14356 Pearl Road), Super Hair Unisex Hair Design (14358 Pearl Road), Minka's Tailoring (14362 Pearl Road), Subway (14364 Pearl Road), Page One Realty (14400 Pearl Road, Suite #1), and William Thompson Jr., Attorney at Law (14400 Pearl Road, Suite #3). The tenant spaces located at 14360 Pearl Road, 14368 Pearl Road and 14400 Pearl Road, Suite #2 were vacant.

A review of the EDR report, an environmental database report, by Atwell-Hicks indicated that two (2) tenant spaces on the Property, 14356 and 14360 Pearl Road, and a tenant space on the northern adjacent property were included on the EDR Dry Cleaner database. These tenant spaces were occupied by several dry cleaners (San-i-System Cleaners Co. at 14356 Pearl Road; SS&A Highlander Center Inc. at 14360 Pearl Road; and Walters Coin Operated Dry Cleaning on the northern adjacent property) in 1967.

Based on a review of historic resources, Atwell-Hicks indicated that prior the 1952, the Property was developed as agricultural land. Commercial development – according to Atwell-Hicks – occurred in the early 1950s with a subsequent building constructed in the south-central portion in approximately 1963. Atwell-Hicks stated that dry cleaning facilities occupied the tenant spaces located at 14356 and 14360 Pearl Road in the late 1960s. In addition, the Atwell-Hicks Phase I ESA indicated that geotechnical sampling conducted by G2 Consulting Group, LLC, at the Property identified the presence of foundry sand at depths between one (1) and four (4) feet below ground surface in the west and northwest portions.

Based on the findings, Atwell-Hicks identified the following “recognized environmental conditions” in connection with the Property:

1. Former use of 14356 Pearl Road tenant space as a dry cleaning facility.
2. Former use of 14360 Pearl Road tenant space as a dry cleaning facility.

3. The presence of foundry sand in the western and northwestern portions of the Property as identified in a geotechnical investigation.
4. Former use of a northern adjacent tenant space (14308 Pearl Road) as a dry cleaning facility.
5. The current use of a northern adjacent tenant space (14312 Pearl Road) as a dry cleaning facility.

As a result, Atwell-Hicks recommended conducting a Phase II Subsurface Investigation of the “recognized environmental conditions”.

Additional Phase II Subsurface Investigation for FTCL – Strongsville – 14400 Pearl Road, 14356-14400 Pearl Road, Strongsville, Ohio, Prepared by Atwell-Hicks, December 4, 2008

Subsequent to the Phase I ESA, Atwell-Hicks performed a Limited Phase II Subsurface Investigation in which concentrations of several volatile organic compounds (VOCs) including cis-1,2-dichloroethene (DCE), trans-1,2-DCE, tetrachloroethene (PCE), trichloroethene (TCE) and vinyl chloride were detected in soil samples exceeding the Ohio Environmental Protection Agency’s (EPA’s) Voluntary Action Program (VAP) Leach Based Soil Values (LBSVs). Based on the findings of the Limited Phase II Subsurface Investigation, Atwell-Hicks conducted additional Phase II activities to determine the extent of subsurface impacts to soil and/or groundwater.

Phase II activities conducted by Atwell-Hicks consisted of installing a total of 25 soil borings and five (5) groundwater monitoring wells and collection of four (4) sub-slab soil gas samples. In addition, six (6) soil borings were converted to temporary well points based on the evidence of groundwater. Six (6) soil borings were installed as part of the Limited Phase II Subsurface Investigation in September 2008, and the remaining 19 soil borings and five (5) monitoring wells were installed in November 2008.

Subsurface materials at the Property – as encountered by Atwell-Hicks – consisted of brown and gray silty clay to a depth of 13 to 14 feet below ground surface overlying gray weathered shale. Following installation of monitoring wells, groundwater was measured at depths between 2.5 and 10 feet below ground surface. Atwell-Hicks concluded that “[t]he groundwater encountered at the site was observed to be relatively inconsistent and perched within sand zones, clay seams and above the underlying shale bedrock.” The monitoring well logs included in the Atwell-Hicks report indicate that wells MW-A and MW-D were installed into two feet of shale bedrock, wells MW-B and MW-C into 0.5 feet of shale bedrock, and well MW-E into one foot of shale bedrock. The monitoring wells installed further into shale bedrock produced more groundwater than the monitoring wells not installed as far into shale bedrock.

Soil analytical results indicated that concentrations of several VOCs were detected in soil samples. Concentrations of cis-1,2-DCE, trans-1,2-DCE, PCE, TCE and/or vinyl chloride in several borings exceeded Ohio EPA’s VAP LBSVs (AH-2 [4’], AH-4 [3’], AH-100 [15’], AH-101 [8’], AH-102 [8’], AH-103 [10’], AH-104 [9’], AH-110 [8’] and AH-113 [14’]). In addition, the detected concentration of PCE in AH-101 at a depth of eight (8) feet below ground surface exceeded Ohio EPA’s VAP Generic Direct Contact Soil Standards for commercial/industrial land use and construction/excavation activities. The soil samples in which concentrations of VOCs that exceeded comparative standards were collected on the exterior portions of the Property. The table below indicates the highest concentrations of VOCs detected in soil that exceeded comparative standards.

Constituent	Highest Concentration
cis-1,2-Dichloroethene	73.0 mg/kg
trans-1,2-Dichloroethene	0.29 mg/kg
Tetrachloroethene	585 mg/kg
Trichloroethene	26.0 mg/kg
Vinyl chloride	0.18 mg/kg

Groundwater analytical results indicated concentrations of several VOCs were detected in groundwater samples. The detected concentrations of 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, TCE and/or vinyl chloride in groundwater samples from monitoring wells MW-D and MW-E exceeded Ohio EPA's VAP Generic Unrestricted Potable Use Standards. The highest concentrations of VOCs in groundwater samples were detected in monitoring well MW-E in the central portion of the Property. The table below indicates the highest concentrations of VOCs detected in groundwater that exceeded comparative standards.

Constituent	Highest Concentration
1,1-Dichloroethene	0.017 mg/L
cis-1,2-Dichloroethene	3.0 mg/L
trans-1,2-Dichloroethene	0.14 mg/L
Tetrachloroethene	33.0 mg/L
Trichloroethene	2.4 mg/L
Vinyl chloride	0.77 mg/L

Soil gas analytical results indicated that concentrations of one or more VOCs were detected in all four (4) soil gas samples collected within buildings on-site (14360, 14364 and 14400, Suite 2 Pearl Road tenant spaces). Atwell-Hicks conducted indoor air modeling by inputting the highest concentration in soil gas samples into the Johnson & Ettinger model. Based on the results of the indoor air modeling, Atwell-Hicks "determined that the VOC excess cancer risk calculated for the subject site is below the Ohio VAP target risk level of 1.0×10^{-5} but above the USEPA target risk level of 1.0×10^{-6} ." In addition, Atwell-Hicks indicated that the hazard index for commercial workers at the Property were below the Ohio EPA VAP and USEPA target hazard index.

Atwell-Hicks concluded that potential human health risks exist at the Property based on the concentrations of VOCs detected in soils and groundwater. Further, Atwell-Hicks determined that the highest concentrations of VOCs are "located in the central portion of the property, beneath existing buildings and below or in close proximity to the proposed building footprint" at depths ranging from 4 to 15 feet below ground surface.

3.0 METHODS OF INVESTIGATION

During January 2011, HzW conducted Phase II ESA activities at the Property, which consisted of soil boring installation and sampling of existing groundwater monitoring wells. HzW installed 16 soil borings (designated HB-01 through HB-16) within the interior and rear exterior portions of the Property. Soil borings were installed to further delineate subsurface soil impacts on-site for the purpose of determining remedial activities. **Figure 3** presents the locations of the soil borings installed at the Property. In addition, HzW sampled four (4) existing groundwater monitoring wells installed by Atwell-Hicks, which were designated MW-B through MW-E. **Figure 4** presents the locations of the existing

groundwater monitoring wells at the Property. Further discussion of the methodologies utilized in Phase II ESA activities and limitations/modifications based on field conditions are presented below.

3.1 *Soil Boring Installation*

Soil borings were installed using manual or hydraulic Geoprobe® direct-push drilling and sampling techniques. Samples were collected utilizing a two-foot long (for manual boring installation) or four-foot long (for hydraulic boring installation) sampling device lined with clean, disposable acetate (plastic) liners, and driven into the subsurface to obtain a core sample of the subsurface material. Upon extraction from the soil, the plastic liner, with core intact, was removed from the sample tube. Each sample liner was opened and field screened in two-foot intervals for the presence of organic vapors using a MiniRAE 2000 photoionization detector (PID). Following completion of field screening activities, the two-foot interval from each boring exhibiting the highest concentration of volatile organic compounds (VOCs) as measured on the PID was sampled and field preserved by EPA Method 5035. The soil samples were placed in an iced cooler for preservation in the field and submitted to Test America Laboratories of North Canton, Ohio, for analysis of VOCs by EPA Method 8260.

A qualified environmental technician characterized each sample interval. Observations noted by the technician included the sample location and number, sample depth, formation material, color, moisture content, odor, and presence or absence of contamination based on visual/olfactory observation. The observations were recorded on a separate boring log completed for each bore installed.

Following completion of sampling activities, all borings installed on the Property were filled with granular bentonite, hydrated and finished to match the surrounding surface. All equipment used during soil sampling activities was decontaminated with a Liqui-Nox® and distilled water solution and triple-rinsed with distilled water after each use to limit the potential for cross contamination.

3.2 *Monitoring Well Sampling*

Groundwater sampling was conducted in accordance with Ohio EPA's *Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring*. Static groundwater levels were measured to within 0.01-foot accuracy using a Solinst® 101 Water Level Meter. The depth to water level and overall well depth were used to calculate the volume of groundwater in each well casing. Each well was purged and sampled using conventional bailing techniques. Using a dedicated polyethylene bailer and string, each monitoring well was purged a minimum of three (3) well volumes until field parameters stabilized. Field parameters including pH, conductivity and temperature were recorded upon removal of each well volume. All purge waters were transferred to a labeled 55-gallon drum. Once a minimum of three (3) well volumes have been removed and field parameters stabilized, groundwater samples were collected in the dedicated bailers and transferred directly to pre-labeled, laboratory-supplied containers. Groundwater samples were placed in an iced cooler for preservation in the field and submitted to GEO Analytical Laboratories, Inc. of Twinsburg, Ohio, for analysis of VOCs by EPA Method 8260.

Sampling personnel wore disposable nitrile gloves throughout the sampling process. All non-disposable sampling equipment will be decontaminated between sampling locations using a Liqui-Nox® liquid detergent and triple-rinsed with distilled water.

3.3 *Limitations and Deviations of Phase II ESA Activities*

The following limitations, deviations and/or field conditions were encountered during Phase II ESA activities:

- Approximately 12 inches of snow cover was present at the Property. The rear parking lot was plowed prior to initiating Phase II ESA activities; however, visual inspection of the asphalt parking lot was limited in areas by 1-2 inches of packed snow cover. The majority of the front parking lot remained snow covered and piles of snow were present along the east side.
- Prior to initiating Phase II ESA activities, the Property owner indicated that a drilling contractor was retained (by the Property owner) to install two (2) additional groundwater monitoring wells in the rear parking lot. During Phase II ESA activities, HzW observed the two (2) additional monitoring wells, which were installed adjacent to MW-D (installed by Atwell-Hicks) and in the vicinity/adjacent to MW-E (installed by Atwell-Hicks). HzW was not able to locate MW-E (installed by Atwell-Hicks) through visual observation or use of a metal detector and hand shovel. Since one of the two additional monitoring wells was installed within the vicinity or adjacent to MW-E, HzW sampled the adjacent additional monitoring well and identified the well as “MW-E”. No additional information concerning the two additional monitoring wells was available from the Property owner or through a review of the Ohio Department of Natural Resources’ Division of Soil and Water Resources.
- HzW was not able to locate monitoring well MW-A (installed by Atwell-Hicks) through visual observation, measurements from scaled maps or use of a metal detector in the front parking lot along Pearl Road. Therefore, monitoring well MW-A was not sampled during Phase II ESA activities.
- The terminal depths of interior soil borings was limited based on the subsurface conditions.

3.4 *QA/QC Sampling*

During Phase II ESA activities, HzW collected quality assurance/quality control (QA/QC) samples as presented in HzW’s Soil SAP. The QA/QC samples collected by HzW consisted of a duplicate soil sample (designated HB-A [6-8’]-011311), an equipment blank (designated EQUIP BLANK, referred to in the Soil SAP as a “Decon Blank”) to assess the quality of decontamination procedures, and three (3) trip blanks (designated TB-01 through TB-03) to assess potential contamination during sample container shipment and storage. A “Bottle Blank” sample as outlined in the Soil SAP was not collected since EPA Method 5035 was employed.

No QA/QC samples were collected during sampling of existing groundwater monitoring wells. HzW anticipated collecting QA/QC samples associated with groundwater sampling as part of implementing HzW’s Ground Water SAP.

4.0 FINDINGS

4.1 *Geology*

Soil borings at the Property were installed to terminal depths between six (6) and twelve (12) feet below ground surface (bgs). Subsurface materials encountered within the borings consisted primarily of dry, hard brown, brown and gray mottled or gray clay with small gravel and shale fragments. Lenses of gray and brown sandy clay, black fine sand or brown sand and gravel were encountered in HB-05 (0.4-

2'), HB-10 (2-4'), HB-11 (1-3'), HB-12 (2-3', 4-6'), HB-13 (2.5-3'), HB-14 (4-6'), HB-15 (2-4'), and HB-16 (0.3-3'). Although no consistent evidence of groundwater (i.e., saturated soils) was identified at the Property, discontinuous lenses of damp to saturated soils were encountered in HB-02 (3-4', 6-7'), HB-06 (4-6'), HB-07 (8-10'), HB-11 (10'), HB-12 (4-6'), HB-13 (7.7-8'), and HB-14 (2-4'). Slight discoloration was identified in several borings consisting of HB-06 (4-6'), HB-07 (4-6'), HB-10 (8-10'), HB-11 (4-8'), HB-13 (4-6'), HB-14 (2-4') and HB-15 (0.6-2'). In addition, slight odors were identified in several borings. A complete description of the subsurface materials encountered during boring installation is presented in the soil boring logs included in **Appendix A**.

4.2 *Soil Analytical Results*

A summary of soil laboratory analytical results for the soil samples from borings installed at the Property is presented in **Table 1**. A copy of the soil laboratory analytical report is included in **Appendix B**.

The anticipated future land use of the Property is commercial/industrial. Soil analytical results were compared to the Ohio Environmental Protection Agency's (EPA) Voluntary Action Program (VAP) single-chemical Generic Direct Contact Soil Standards (GDCS) for commercial/industrial land use and construction/excavation activity scenarios, and the derived Leach-Based Soil Values (LBSVs) for Soil Type III (silts, clays). The GDCS values were developed to be protective of the environment and human health based on predictive models regarding potential exposures to adults from dermal contact with soil, inhalation of vapors and particles from soil, and ingestion of soil. LBSVs were developed to be protective of potable water, based on predictive models of water transport, sediment transport, and pollutant fate, and represent the concentration of a constituent of concern that typically can remain in the soil such that leaching of the constituents to groundwater above Generic Unrestricted Potable Use Standards (GUPUS) will not occur. The reference standards associated with each detected chemical of concern are listed with the soil analytical results in **Table 1**.

The regulatory standards referenced as part of this project are for comparative use only and may not be directly applicable to the Property. The Ohio VAP standards referenced in this report apply only to sites that are participants in Ohio's Voluntary Action Program. However, because the Ohio EPA recognizes these standards as being protective of human health and the environment, they provide a useful tool for assessing environmental conditions at the Property.

Soil analytical results indicate that concentrations of several VOCs consisting of acetone, carbon disulfide, cis-1,2-DCE, PCE, toluene, TCE and/or vinyl chloride were detected in several soil samples. Although soil analytical results indicate that the detected concentrations of PCE in HB-08 (6-8'), 97.0 milligrams per kilogram (mg/kg), and in HB-11 (8-10'), 67.0 mg/kg, exceed VAP single-chemical GDCS for commercial/industrial land use, these soil samples were collected below the point of compliance for commercial/industrial land use. None of the remaining concentrations of VOCs detected in soil samples exceeded VAP single-chemical GDCS for commercial/industrial land use. Similarly, the detected concentrations of VOCs were below VAP single-chemical GDCS for construction/excavation activities.

Concentrations of several VOCs are present in soil in excess of VAP generic LBSVs. The detected concentrations of VOCs in the following soil samples exceeded VAP generic LBSVs:

- HB-08 (6-8'): cis-1,2-DCE; PCE; and TCE
- HB-09 (6-8'): cis-1,2-DCE
- HB-10 (8-10'): cis-1,2-DCE and TCE
- HB-11 (8-10'): PCE and TCE

- HB-12 (0-2'): cis-1,2-DCE and PCE
- HB-14 (8-10'): cis-1,2-DCE

4.3 Groundwater Analytical Results

A summary of groundwater laboratory analytical results for the groundwater samples collected from existing monitoring wells at the Property is presented in **Table 2**. A copy of the groundwater laboratory analytical report for existing monitoring wells is included in **Appendix B**.

Groundwater analytical results were compared to the Ohio EPA's VAP Generic Unrestricted Potable Use Standards (GUPUS). The regulatory standards referenced as part of this project are for comparative use only and may not be directly applicable to the Property. The Ohio VAP standards referenced in this report apply only to sites that are participants in Ohio's Voluntary Action Program. However, because the Ohio EPA recognizes these standards as being protective of human health and the environment, they provide a useful tool for assessing environmental conditions at the Property.

According to groundwater analytical results, concentrations of cis-1,2-DCE, trans-1,2-DCE, PCE, TCE and/or vinyl chloride were detected in MW-D and MW-E. The detected concentrations of cis-1,2-DCE, PCE, TCE and vinyl chloride in MW-D and MW-E exceeded VAP GUPUS.

Based on groundwater analytical results collected by Atwell-Hicks and HzW, the concentrations of VOCs appear to continue leaching to groundwater. Groundwater flow direction was not established at the Property by HzW during the portion of Phase II activities completed. Based on a review of physical setting resources in Section 2.1, regional topography within the vicinity of the Property slopes northwest and west. Should groundwater flow direction correlate with regional topography, the potential exists for impacted groundwater to migrate off site and pose an off-site vapor intrusion risk.

4.4 QA/QC Analytical Results

A summary of the QA/QC sample analytical results is presented in **Table 3**. The laboratory analytical results for the QA/QC samples are included with the soil laboratory analytical report in Appendix A.

QA/QC analytical results indicate that one (1) VOC, toluene, was detected in the duplicate soil sample HB-A (6-8'). The duplicate soil sample was obtained from HB-06 (6-8') in which acetone was the only VOC detected. Although the same constituents were not detected in HB-06 (6-8') and the duplicate soil sample, the detection of acetone in HB-06 (6-8') and the detection of toluene in the duplicate soil sample from HB-06 were within an order of magnitude of the detection limits.

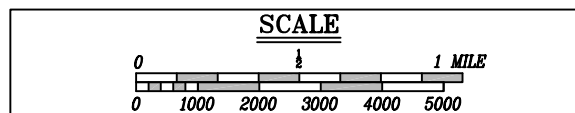
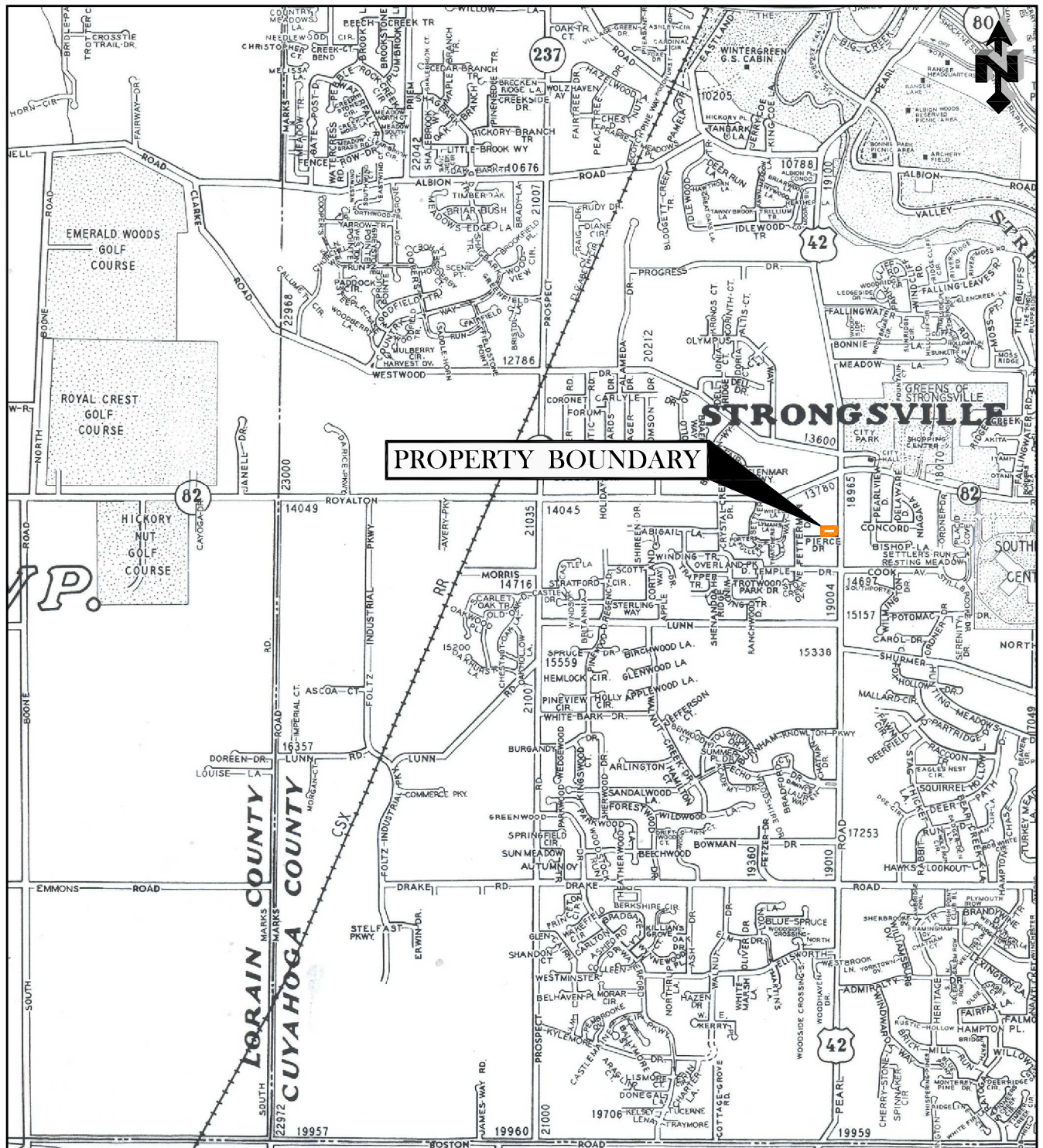
No concentrations of VOCs were detected in the equipment blank indicating that the quality of decontamination is sufficient to prevent possible cross-contamination. Concentrations of acetone were detected in all three (3) trip blanks. Acetone was detected in one (1) soil sample; therefore, the detection of acetone in the trip blanks may be attributable to laboratory contamination in preparation of the trip blanks or during shipment of the trip blanks and sample media to HzW.

5.0 CONCLUSIONS

Limited Phase II ESA activities were conducted at the Property, which consisted of further delineating subsurface soil impacts and assessing current groundwater conditions at existing groundwater monitoring wells. Soil analytical results indicate that concentrations of several VOCs consisting of cis-1,2-DCE, trans-1,2-DCE, PCE, TCE and vinyl chloride remain in soil in excess of VAP generic LBSVs west of the location at which Atwell-Hicks terminated assessment activities. In addition, the detected concentrations of PCE in HB-08 (6-8') and HB-11 (8-10') – although below the commercial/industrial land use point of compliance – are present in the subsurface in excess of the VAP single-chemical GDCS for commercial/industrial land use.

Groundwater analytical results indicate that concentrations of cis-1,2-DCE, trans-1,2-DCE, PCE, TCE and/or vinyl chloride in MW-D and MW-E exceed VAP GUPUS. Groundwater flow direction was not established at the Property by HzW during the portion of Phase II activities completed. However, should groundwater flow direction correlate with regional topography, the potential exists for impacted groundwater to migrate off site and pose an off-site vapor intrusion risk.

FIGURES

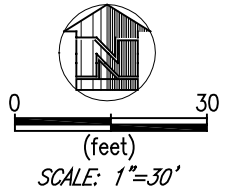


HzW ENVIRONMENTAL
CONSULTANTS, LLC

6105 Heisley Rd. ■ Mentor, OH 44060
440-357-1260 ■ Fax 440-357-1510

FIGURE 1
SITE LOCATION MAP
14356-14400 PEARL ROAD,
STRONGSVILLE, CUYAHOGA COUNTY, OHIO

I:\2010\H10013-11\Phase II\CADD\WGS\1001311-CURRENT-F2.dwg gblhart Nov 19, 2010

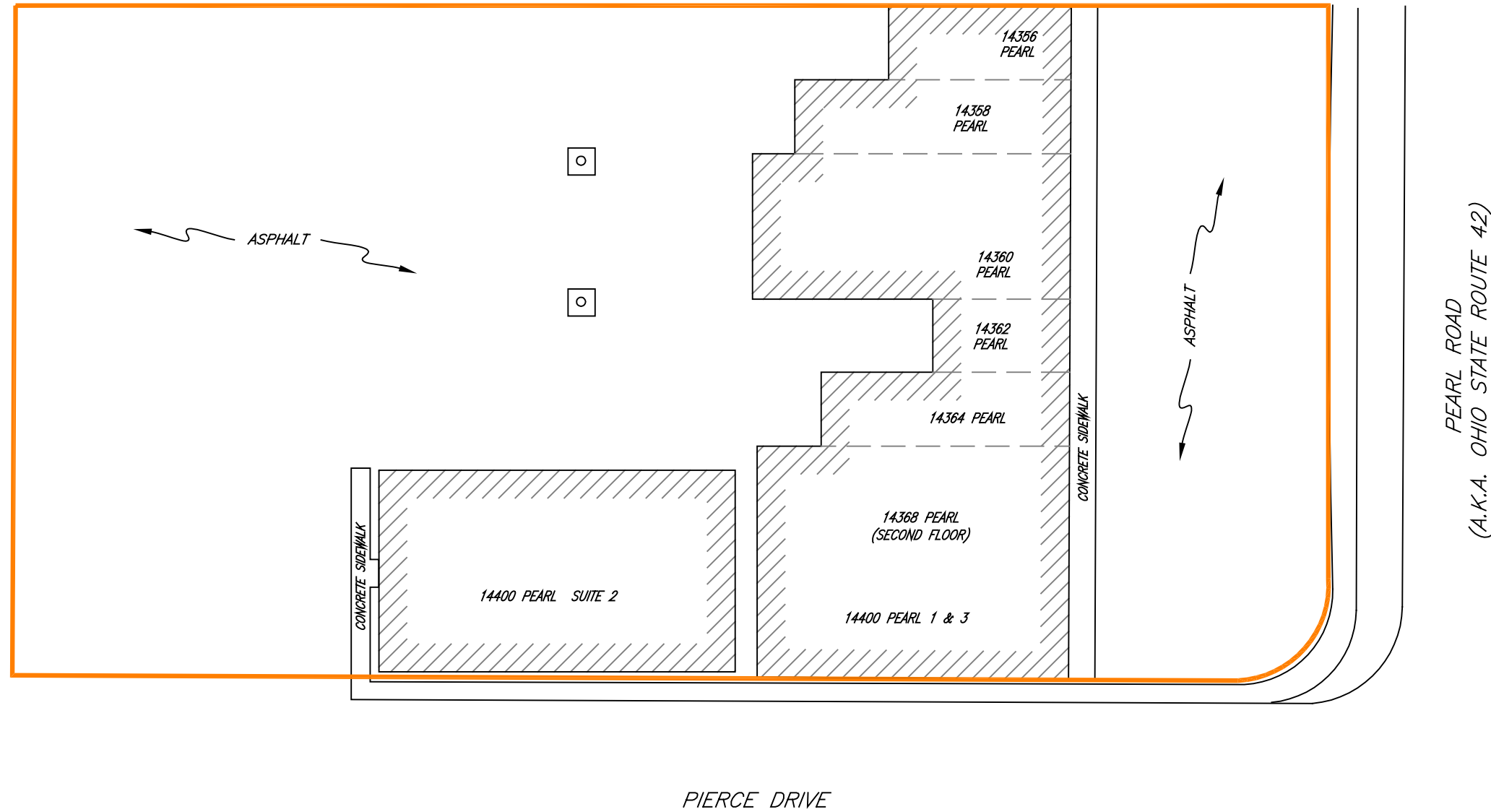


LEGEND

- PROPERTY BOUNDARY
- /// BUILDING

NOTE

BASE MAP GENERATED AND TAKEN FROM
ATWELL HICKS.



HzW ENVIRONMENTAL
CONSULTANTS, LLC

6105 Heisley Rd. ■ Mentor, OH 44060
440-357-1260 ■ Fax 440-357-1510

FIGURE 2
CURRENT SITE FEATURES
14356-14400 PEARL ROAD,
STRONGSVILLE, CUYAHOGA COUNTY, OHIO

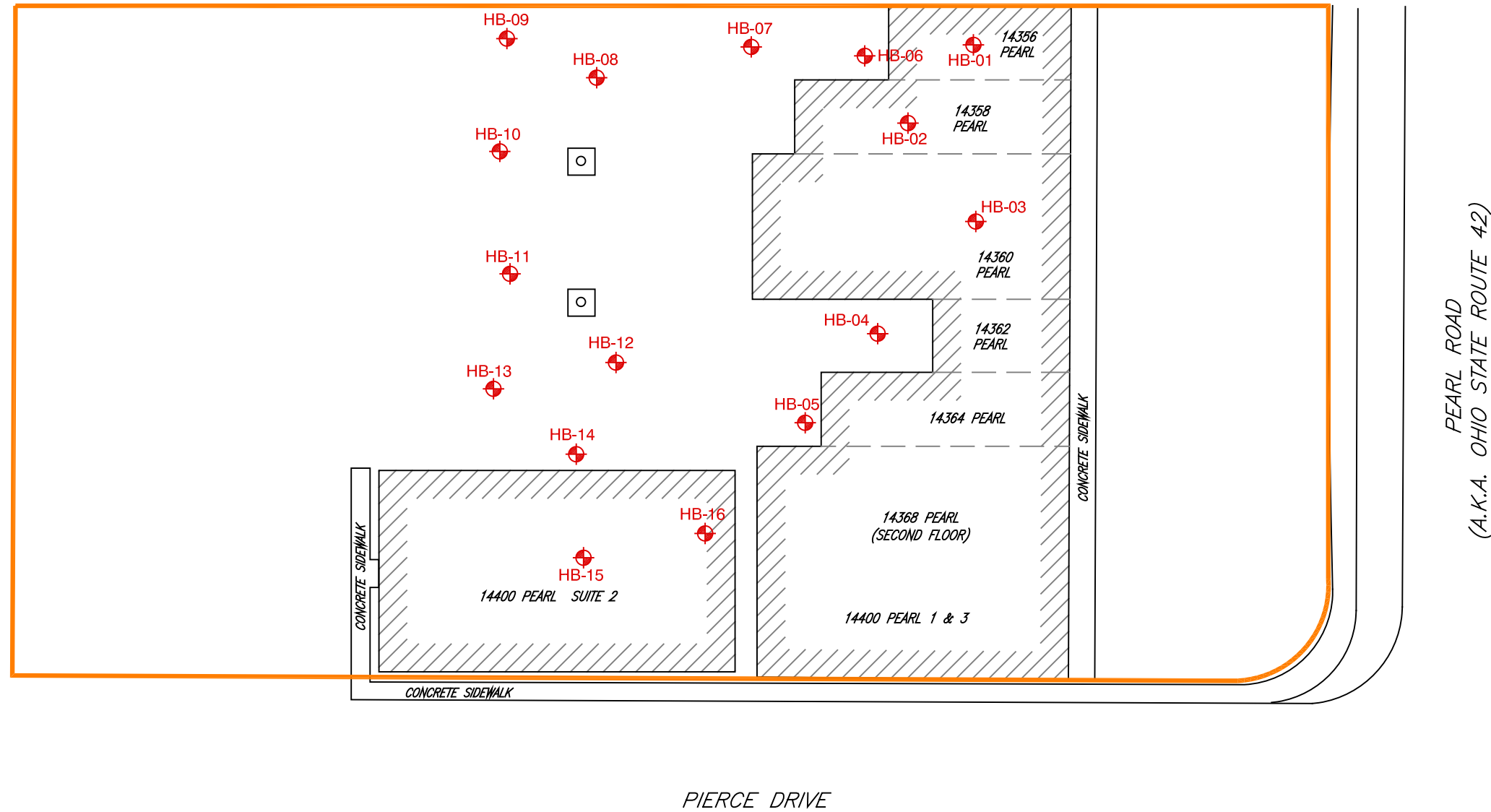
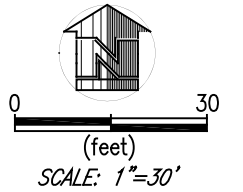
I:\2010\H10013-11\Phase II\CADD\WGS\1001311-BORE LOC EXIST F3.dwg gbihart Jul 20, 2011

LEGEND

- PROPERTY BOUNDARY
- BUILDING
- EXISTING SOIL BORING LOCATION

NOTE

BASE MAP GENERATED AND TAKEN FROM
ATWELL HICKS.

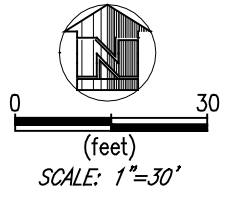


HzW ENVIRONMENTAL
CONSULTANTS, LLC




6105 Heisley Rd. ■ Mentor, OH 44060
440-357-1260 ■ Fax 440-357-1510

FIGURE 3
SOIL BORING LOCATION MAP
14356-14400 PEARL ROAD,
STRONGSVILLE, CUYAHOGA COUNTY, OHIO

I:\2010\H10013-11\Phase I\CAD\DWGS\1001311-MON WELLS EXIST F4.dwg gbi:har Mar 08, 2011

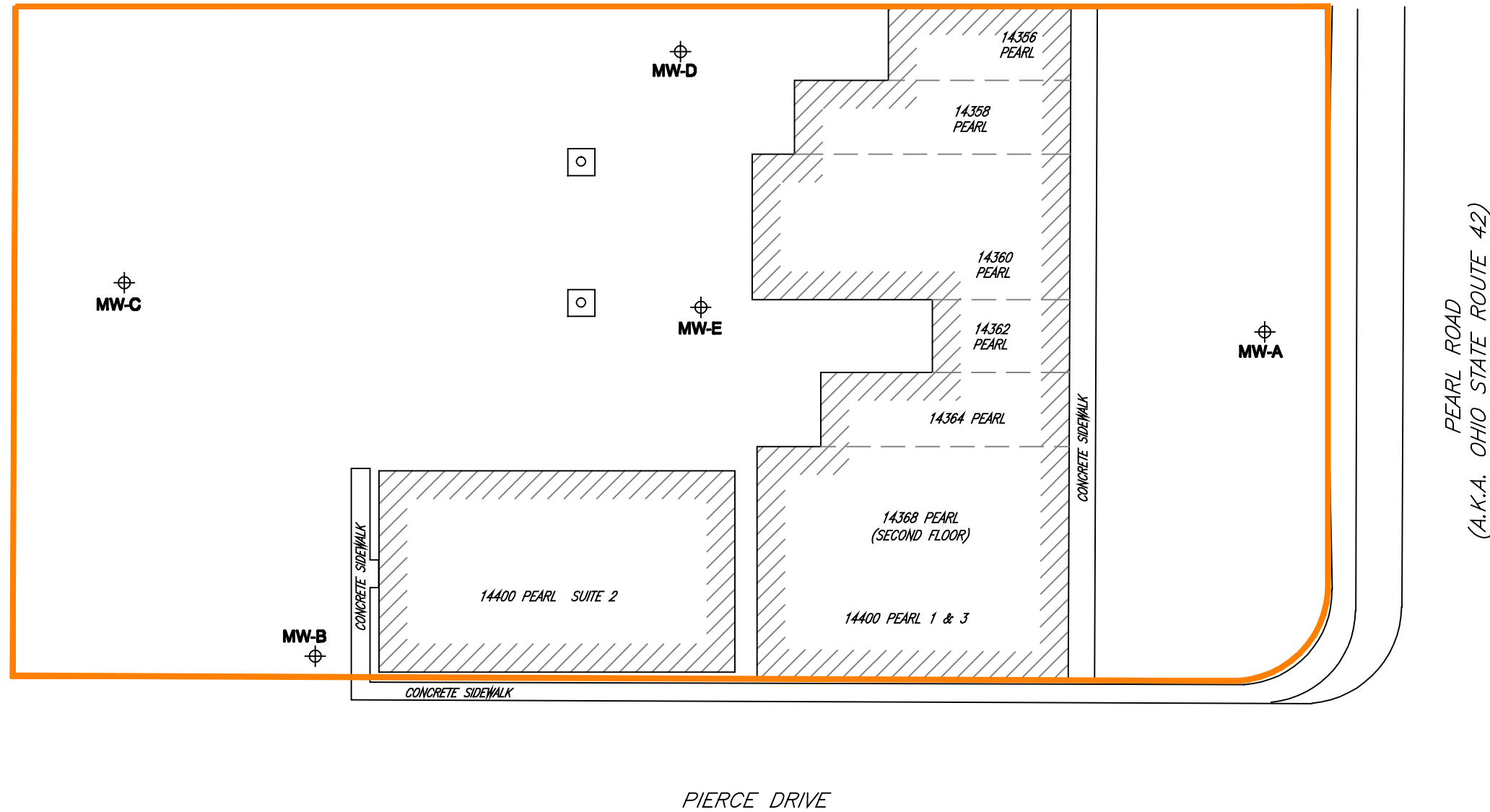


LEGEND

-  PROPERTY BOUNDARY
-  BUILDING
-  ATWELL MONITORING WELL LOCATION

NOTE

BASE MAP GENERATED AND TAKEN FROM
ATWELL HICKS.



H&W ENVIRONMENTAL
CONSULTANTS, LLC

6105 Heisley Rd. ■ Mentor, OH 44060
440-357-1260 ■ Fax 440-357-1510

FIGURE 4
EXISTING GROUNDWATER MONITORING
WELL LOCATION MAP
14356-14400 PEARL ROAD,
STRONGSVILLE, CUYAHOGA COUNTY, OHIO

TABLES

Table 1
Summary of Soil Analytical Results
14356-14400 Pearl Road
Strongsville, Ohio
(All results presented in mg/kg)

Sample Number	HB-01 (2-4')-012011	HB-02 (4-6')-011411	HB-03 (6-8')-011411	HB-04 (4-6')-012011	HB-05 (0-2')-012011	HB-06 (6-8')-011311	HB-07 (6-8')-011311	HB-08 (6-8')-011311	HB-09 (6-8')-011311	HB-10 (8-10')-011311	HB-11 (8-10')-011311	HB-12 (0-2')-011311	HB-13 (4-6')-011311	HB-14 (8-10')-011311	HB-15 (4-6')-011411	HB-16 (4-6')-011411	Comm./Ind.	Const./Exc.	
Date Sampled	1/20/2011	1/14/2011	1/14/2011	1/20/2011	1/20/2011	1/13/2011	1/13/2011	1/13/2011	1/13/2011	1/13/2011	1/13/2011	1/13/2011	1/13/2011	1/13/2011	1/14/2011	1/14/2011	GDCS ¹	GDCS ²	LBSV ³
VOCs - EPA Method 8260																			
Acetone	<0.021	<0.017	<0.02	<1.0	<0.021	0.02	<0.022	<12.0	<0.88	<0.92	<8.2	<1.6	<0.022	<0.94	<0.02	<0.019	100,000	100,000	NGS
Carbon disulfide	<0.005	<0.004	<0.005	<0.26	<0.005	<0.004	<0.006	<3.0	<0.22	<0.23	<2.1	<0.4	0.009	<0.23	0.012	<0.005	1,400	190	NGS
cis-1,2-Dichloroethene	<0.005	<0.004	0.04	<0.26	<0.005	<0.004	<0.006	15.0	5.1	0.74	<2.1	0.84	0.053	1.3	<0.005	<0.005	2,200	2,200	0.12
Tetrachloroethene	<0.005	<0.004	<0.005	<0.26	<0.005	<0.004	0.006	97.0	<0.22	<0.23	67.0	1.6	<0.006	<0.23	<0.005	<0.005	53	220	0.27
Toluene	<0.005	<0.004	<0.005	0.44	<0.005	<0.004	<0.006	<3.0	<0.22	<0.23	<2.1	<0.4	0.011	<0.23	<0.005	<0.005	520	520	7.7
Trichloroethene	<0.005	<0.004	<0.005	<0.26	<0.005	<0.004	<0.006	13.0	<0.22	1.6	2.4	<0.4	<0.006	<0.23	<0.005	<0.005	150	560	0.048
Vinyl chloride	<0.005	<0.004	0.008	<0.26	<0.005	<0.004	<0.006	<3.0	<0.22	<0.23	<2.1	<0.4	<0.006	<0.23	<0.005	<0.005	12	48	0.012

Bolded values indicate laboratory detections
Blue values exceed VAP generic LBSVs
¹VAP Generic Direct Contact Soil Standards for Commercial/Industrial Land Use per OAC 3745-300-08(C)(3)(c), Table II
²VAP Generic Direct Contact Soil Standards for Construction/Excavation Activities per OAC 3745-300-08(C)(3)(d), Table III
³VAP Derived Generic Leach-Based Soil Values for Soil Class III per Ohio EPA Technical Guidance Document, October 2008
NGS = No generic standard

Table 2
Summary of Groundwater Analytical Results - Existing Monitoring Wells
14356-14400 Pearl Road
Strongsville, Ohio
(All results presented in mg/L)

Well Number Date Sampled	MW-B 1/14/2011	MW-C 1/14/2011	MW-D 1/14/2011	MW-E* 1/14/2011	GUPUS¹
<i>VOCs - EPA Method 8260</i>					
cis-1,2-Dichloroethene	<0.005	<0.005	0.683	2.3	0.07
trans-1,2-Dichloroethene	<0.005	<0.005	0.018	<0.5	0.1
Tetrachloroethene	<0.005	<0.005	0.01	48.6	0.005
Trichloroethene	<0.005	<0.005	0.205	1.67	0.005
Vinyl chloride	<0.002	<0.002	0.12	0.314	0.002

Wells installed by Atwell-Hicks

*Original MW-E installed by Atwell-Hicks not located. Additional well installed by drilling contractor in vicinity/location of MW-E sampled.

Bolded values indicate laboratory detections

Red values exceed VAP GUPUS

¹VAP Generic Unrestricted Potable Use Standards per OAC 3745-300-08(D)(3)(b) and (c), Tables V and VI

Table 3
Summary of QA/QC Sample Analytical Results
14356-14400 Pearl Road
Strongsville, Ohio

Sample Number	HB-A (6-8')- 011311	EQUIP BLANK	TB-01	TB-02	TB-03
Sample Date	1/13/2011	1/14/2011			
Media	Soil	Water	Water	Water	Water
Reporting Units	mg/kg	mg/L	mg/L	mg/L	mg/L
<i>VOCs - EPA Method 8260</i>					
Acetone	<0.018	<0.01	0.014	0.015	0.01
Toluene	0.005	<0.001	<0.001	<0.001	<0.001

APPENDIX A

SOIL BORING LOGS

Bore ID: HB-01

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HZW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/20/2011

Drilled By: HzW Environmental

Drill Method: Manual Direct Push

Sample Method: Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface CONCRETE		The 2-4 foot interval submitted for laboratory analysis
1		Brown CLAY w/ gravel, dry, soft	0.0	
2				
3		Gray CLAY, moist, soft	0.7	
4		Gray CLAY w/ shale fragments, dry, hard		
5			0.3	
6		Probe refusal at 6'		
7		End of Bore		

Bore ID: HB-02

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/14/2011

Drilled By: HzW Environmental

Drill Method: Manual Direct Push

Sample Method: Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 4-6 foot interval submitted for laboratory analysis
		CONCRETE		
		Brown CLAY w/ trace sand and small gravel, dry, firm	0.4	
1				
2				
3		Gray silty CLAY w/ trace silt and sand, damp, soft	0.4	
4		Brown and gray mottled CLAY, little moisture to dry, hard	0.4	
5				
6		Gray silty CLAY, saturated, soft	0.4	
7		Brown and gray mottled CLAY, dry, hard	0.4	
8		End of Bore		
9				

Bore ID: HB-03

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/14/2011

Drilled By: HzW Environmental

Drill Method: Manual Direct Push

Sample Method: Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		
		CONCRETE		
		Brown CLAY w/ small gravel, dry, firm	0.3	
1				
2				
3		Gray CLAY w/ trace sand, dry, firm	0.3	
4		Gray w/ few brown mottles CLAY, dry, hard to very hard	0.3	
5				
6				
7		Probe refusal at 8'	0.5	
8		End of Bore		
9				

Bore ID: HB-04

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/20/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 4-6 foot interval submitted for laboratory analysis
		ASPHALT & crushed red BRICK		
1		Brown CLAY, dry, soft	0.1	
2				
3		Gray CLAY w/ some sand lenses, moist, soft	0.2	
4				
5			0.3	
6		Gray and brown mottled CLAY w/ shale fragments, dry, hard		
7		Probe refusal at 8'	0.1	
8		End of Bore		
9				

Bore ID: HB-05

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/20/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 0-2 foot interval submitted for laboratory analysis
		ASPHALT & GRAVEL	0.2	
		Brown sandy CLAY, dry, soft		
1				
2		Gray CLAY w/ small gravel, dry, soft	0.1	
3				
4		Gray CLAY w/ sand lenses, dry, hard	0.1	
5				
6		Gray CLAY w/ shale fragments, dry, hard	0.1	
7		Probe refusal at 8'		
8		End of Bore		
9				

Bore ID: HB-06

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		
		ASPHALT		
		Brown CLAY w/ small gravel and trace sand, dry, hard	0.5	
1				
2		Brown and gray mottled CLAY w/ small gravel, dry, firm	0.5	
3				
4		Light gray w/ brown mottles silty CLAY w/ trace sand, damp, firm, slight discoloration	0.6	
5				
6		Brown w/ gray mottles CLAY w/ small gravel, dry, hard	0.8	
7				
8		Brown w/ gray mottles CLAY w/ shale fragments, dry, very hard	0.6	
9				
10				
11		Probe refusal at 12'	0.7	
12		End of Bore		
13				

Bore ID: HB-07

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 6-8 foot interval submitted for laboratory analysis
		ASPHALT		
		Coarse SAND w/ gravel		
1		Brown CLAY w/ small gravel, dry, hard to very hard	0.4	
2				
3			0.5	
4		Gray w/ brown mottles CLAY, dry, firm, discoloration/black streaking		
5			0.5	
6		Gray and brown mottled CLAY, dry, hard		
7			0.6	
8		Gray and brown silty CLAY w/ gravel, saturated from 8-10', slightly moist from 10-12', hard		
9			0.4	
10				
11			0.4	
12		End of Bore		
13				

Bore ID: HB-08

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 6-8 foot interval submitted for laboratory analysis
		ASPHALT		
		Brown CLAY w/ gravel, dry, hard to very hard, slight odor from 0-2'	3.3	
1				
2				
3			0.7	
4				
		Gray w/ brown mottles CLAY, dry, hard		
5			1.2	
6				
7			5.3	
8				
		Brown CLAY w/ shale fragments, dry, very hard		
9			4.2	
10				
11			2.1	
12		End of Bore		
13				

Bore ID: HB-09

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 6-8 foot interval submitted for laboratory analysis
		ASPHALT		
		GRAVEL/SLAG		
1		Gray and brown mottled CLAY w/ small gravel, dry, firm	0.6	
2				
		Very slight moisture at 4'		
3			0.8	
4		Brown and gray CLAY w/ trace silt, dry, firm Damp at 7.9-8'		
5			0.6	
6				
7			7.1	
8		Brown and gray mottled CLAY w/ gravel to shale fragments, dry, hard to very hard		
9			1.7	
10				
11			0.7	
12				
13			1.3	
14		End of Bore		
15				

Bore ID: HB-10

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 8-10 foot interval submitted for laboratory analysis
		ASPHALT		
		Black coarse sandy SLAG		
1		Brown and gray mottled CLAY w/ gravel, dry, hard	0.3	
2		Black fine SAND, dry, dense		
3		Gray sandy CLAY w/ gravel, dry, firm	0.5	
4		Gray CLAY w/ trace silt, dry, firm		
5			0.3	
6		Brown and gray mottled CLAY w/ few gravel, dry, hard		
7			0.5	
8		Brown and gray mottled CLAY w/ light gray fine sand, dry, hard, slight discoloration and very little odor		
9			2.5	
10		Brown CLAY w/ small gravel, dry, hard		
11			0.4	
12		Brown and gray CLAY w/ shale fragments, dry, very hard		
13			0.5	
14		End of Bore		
15				

Bore ID: HB-11

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		
		ASPHALT		
		Brown CLAY w/ gravel, dry, firm		
1		Black fine SAND, dry, dense	0.4	
2				
3		Brown CLAY w/ gravel, dry to damp at 4', firm	0.5	
4		Gray and brown mottled CLAY w/ some small gravel, dry, firm to very hard, slight discoloration		
5			0.7	
6				
7			1.6	
8		Brown CLAY w/ few gravel, damp to saturated at 10', hard, slight odor		The 8-10 foot interval submitted for laboratory analysis
9		Boring terminated at 10' based on presence of groundwater	2.6	
10		End of Bore		
11				

Bore ID: HB-12

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HZW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 0-2 foot interval submitted for laboratory analysis
		ASPHALT		
		Brown sandy CLAY w/ gravel, dry, firm	0.7	
1				
2		Black fine SAND, dry, dense		
3		Brown and gray CLAY, very little moisture, firm	0.4	
4		Black fine SAND, saturated, loose		
5			0.4	
6		Brown and gray mottled CLAY w/ small gravel, dry, hard		
7			0.4	
8		Brown and gray mottled CLAY w/ shale fragments from 10-12', dry, very hard		
9			0.6	
10				
11			0.5	
12		End of Bore		
13				

Bore ID: HB-11

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		The 4-6 foot interval submitted for laboratory analysis
		ASPHALT		
		Brown CLAY w/ trace sand and gravel, dry, hard	0.5	
1				
2				
		Black fine SAND, dry, dense	0.5	
3		Brown and gray mottled CLAY, slight staining at 4'		
4		Dark gray w/ brown mottles CLAY, dry, firm to hard, slight discoloration	0.6	
5				
6		Brown w/ gray mottles CLAY w/ small gravel, dry, hard Saturated at 7.7'	0.5	
7		Boring terminated at 8' based on presence of groundwater		
8		End of Bore		
9				

Bore ID: HB-14

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HZW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/13/2011

Drilled By: HzW Environmental

Drill Method: Hydraulic Direct Push

Sample Method: Macro Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		
		ASPHALT		
1		Brown CLAY w/ coarse sand and gravel, dry, firm	0.4	
2		Gray CLAY w/ small gravel and trace silt, damp, firm, slight discoloration	0.5	
3				
4		Gray w/ brown mottles sandy CLAY, dry, firm	0.4	
5				
6		Brown w/ few gray mottles CLAY w/ small gravel, dry, hard	0.4	
7				
8		Brown CLAY w/ shale fragments, dry, very hard	1.5	
9				
10				
11		Probe refusal at 12'	0.4	
12		End of Bore		
13				

Bore ID: HB-15

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/14/2011

Drilled By: HzW Environmental

Drill Method: Manual Direct Push

Sample Method: Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface CONCRETE		
		Brown coarse SAND		
1		Gray and brown CLAY, dry, firm, slight discoloration	0.4	
2		Brown w/ few gray mottles sandy CLAY, dry, firm		
3			0.4	
4		Brown and gray mottled CLAY, dry, very hard		
5			0.5	
		Probe refusal at 6'		
6		End of Bore		
7				

Bore ID: HB-16

Project No.: H10013-11

Project: Phase II ESA

HZW Representative: JAD, TMF, JAH

Location: 14356-14400 Pearl Rd., Strongsville, Ohio



HzW ENVIRONMENTAL
CONSULTANTS, LLC

Drill Date: 01/14/2011

Drilled By: HzW Environmental

Drill Method: Manual Direct Push

Sample Method: Core

Depth (feet)	Symbol	Description	PID (ppm)	Remarks
0		Ground Surface		
		CONCRETE		
		Brown sandy CLAY w/ small gravel, dry, firm	0.4	
1				
2		Brown coarse SAND w/ slag		
3		Gray w/ few brown mottles CLAY, dry, firm	0.4	
4		Brown w/ gray mottles CLAY, dry, hard		
5			0.4	
		Probe refusal at 6'		The 4-6 foot interval submitted for laboratory analysis
6		End of Bore		
7				

APPENDIX B

SOIL LABORATORY ANALYTICAL REPORTS

Affidavit by Certified Lab Pursuant to OAC 3745-300-13(M)

TestAmerica Laboratories, Inc.

State of Ohio

SS:

County of Stark

I, Dorothy J. Leeson, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

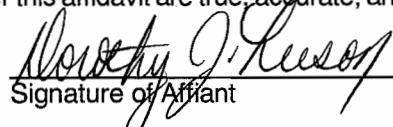
1. I am an adult over the age of eighteen (18) years old and competent to testify herein.
2. I am employed by TestAmerica Laboratories, Inc. as Quality Assurance Manager and authorized to submit this affidavit on behalf of TestAmerica North Canton.
3. The purpose of this submission is to support a request for a no further action letter or other aspects of a voluntary action, under Ohio's Voluntary Action Program (VAP) as set forth in Ohio Revised Code Chapter 3746 and Ohio Administrative Code (OAC) Chapter 3745-300.
4. TestAmerica North Canton performed analyses on behalf of **HZW Environmental Consultants** for a voluntary action at property known as **Strongsville, 14356-14440 Pearl Road, Strongsville, Ohio.**
5. This affidavit applies to and is submitted with the following information, data, documents or reports for the property:

Laboratory Report Number
A1A190466

Report Date
January 28, 2011

6. TestAmerica North Canton was a VAP certified laboratory pursuant to OAC 3745-300-04 when it performed analyses referenced herein.
7. The analyses under this affidavit consist of certified data, as described by OAC 3745-300-04(B) with the exception of the analytes, parameter groups, or methods listed below:
Not applicable.
8. TestAmerica North Canton performed the analyses within its current VAP certification. The laboratory was certified for each analyte, parameter group and method used at the time that it performed the analyses. The analyses were performed consistent with the laboratory's standard operating procedures and quality assurance program plan as approved under OAC 3745-300-04.
9. The information, data, documents, and reports identified under this affidavit are true, accurate, and complete.

Further affiant sayeth naught.


Signature of Affiant

Sworn to before me this 1st day of February, 2011.



JEFFREY C. SMITH
Notary Public, State of Ohio
My Commission Expires Feb. 12, 2012


Jeffrey C. Smith
Notary Public

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. H10013-11

STRONGSVILLE

Lot #: A1A190466

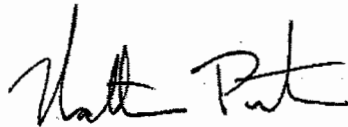
Doug Wetzel

HZW Environmental Consultants

6105 Heisley Rd

Mentor, OH 44060

TESTAMERICA LABORATORIES, INC.



Nathan Pietras

Project Manager

nathan.pietras@testamericainc.com

Approved for release.
Nathan Pietras
Project Manager
1/31/2011 10:00 AM

January 28, 2011



CASE NARRATIVE

A1A190466

The following report contains the analytical results for fourteen solid samples, one water sample and two quality control samples submitted to TestAmerica North Canton by HZW Environmental Consultants from the STRONGSVILLE Site, project number H10013-11. The samples were received January 19, 2011, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Doug Wetzel on January 26, 2011, and January 27, 2011. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

All parameters were evaluated to the reporting limit.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Nathan Pietras, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt were 2.6 and 2.9°C.

GC/MS VOLATILES

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch 1021283 and 1024167. Therefore, the laboratory has included a Laboratory Control Sample Duplicate (LCSD) in the QC batch. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the reparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

<u>Volatile (GC or GC/MS)</u>	<u>Semivolatile (GC/MS)</u>	<u>Metals ICP-MS</u>	<u>Metals ICP Trace</u>
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.
- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the reparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.



TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada (#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190), NAVY, ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

EXECUTIVE SUMMARY - Detection Highlights

A1A190466

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
HB-02(4-6')-011411 01/14/11 10:20 001				
Percent Solids	81.9	10.0	%	MCAWW 160.3 MOD
HB-03(6-8')-011411 01/14/11 09:50 002				
cis-1,2-Dichloroethene	40	5.0	ug/kg	SW846 8260B
Vinyl chloride	7.7	5.0	ug/kg	SW846 8260B
Percent Solids	81.6	10.0	%	MCAWW 160.3 MOD
HB-06(6-8')-011311 01/13/11 14:15 003				
Acetone	20	17	ug/kg	SW846 8260B
Percent Solids	85.3	10.0	%	MCAWW 160.3 MOD
HB-07(6-8')-011311 01/13/11 13:49 004				
Tetrachloroethene	5.8	5.6	ug/kg	SW846 8260B
Percent Solids	81.7	10.0	%	MCAWW 160.3 MOD
HB-08(6-8')-011311 01/13/11 13:35 005				
cis-1,2-Dichloroethene	15000	3000	ug/kg	SW846 8260B
Tetrachloroethene	97000	3000	ug/kg	SW846 8260B
Trichloroethene	13000	3000	ug/kg	SW846 8260B
Percent Solids	83.2	10.0	%	MCAWW 160.3 MOD
HB-09(6-8')-011311 01/13/11 11:10 006				
cis-1,2-Dichloroethene	5100	220	ug/kg	SW846 8260B
Percent Solids	85.2	10.0	%	MCAWW 160.3 MOD
HB-10(8-10')-011311 01/13/11 11:38 007				
cis-1,2-Dichloroethene	740	230	ug/kg	SW846 8260B
Trichloroethene	1600	230	ug/kg	SW846 8260B
Percent Solids	85.6	10.0	%	MCAWW 160.3 MOD
HB-11(8-10')-011311 01/13/11 11:55 008				
Tetrachloroethene	67000	2100	ug/kg	SW846 8260B
Trichloroethene	2400	2100	ug/kg	SW846 8260B
Percent Solids	85.3	10.0	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A1A190466

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
HB-12(0-2')-011311 01/13/11 13:10 009				
cis-1,2-Dichloroethene	840	400	ug/kg	SW846 8260B
Tetrachloroethene	1600	400	ug/kg	SW846 8260B
Percent Solids	87.9	10.0	%	MCAWW 160.3 MOD
HB-13(4-6')-011311 01/13/11 12:05 010				
Carbon disulfide	8.8	5.6	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	53	5.6	ug/kg	SW846 8260B
Toluene	11	5.6	ug/kg	SW846 8260B
Percent Solids	72.7	10.0	%	MCAWW 160.3 MOD
HB-14(8-10')-011311 01/13/11 12:35 011				
cis-1,2-Dichloroethene	1300	230	ug/kg	SW846 8260B
Percent Solids	86.6	10.0	%	MCAWW 160.3 MOD
HB-15(4-6')-011411 01/14/11 11:40 012				
Carbon disulfide	12	5.0	ug/kg	SW846 8260B
Percent Solids	78.0	10.0	%	MCAWW 160.3 MOD
HB-16(4-6')-011411 01/14/11 11:24 013				
Percent Solids	80.3	10.0	%	MCAWW 160.3 MOD
HB-A(6-8')-011311 01/13/11 014				
Toluene	4.9	4.5	ug/kg	SW846 8260B
Percent Solids	84.8	10.0	%	MCAWW 160.3 MOD
TB-01 01/14/11 016				
Acetone	14	10	ug/L	SW846 8260B
TB-02 01/14/11 017				
Acetone	15	10	ug/L	SW846 8260B

ANALYTICAL METHODS SUMMARY

A1A190466

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Total Residue as Percent Solids	MCAWW 160.3 MOD
Volatile Organics by GC/MS	SW846 8260B

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A1A190466

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDGK3	001	HB-02 (4-6')-011411	01/14/11	10:20
MDGLF	002	HB-03 (6-8')-011411	01/14/11	09:50
MDGLG	003	HB-06 (6-8')-011311	01/13/11	14:15
MDGLH	004	HB-07 (6-8')-011311	01/13/11	13:49
MDGLL	005	HB-08 (6-8')-011311	01/13/11	13:35
MDGLM	006	HB-09 (6-8')-011311	01/13/11	11:10
MDGLN	007	HB-10 (8-10')-011311	01/13/11	11:38
MDGLQ	008	HB-11 (8-10')-011311	01/13/11	11:55
MDGLR	009	HB-12 (0-2')-011311	01/13/11	13:10
MDGLT	010	HB-13 (4-6')-011311	01/13/11	12:05
MDGLW	011	HB-14 (8-10')-011311	01/13/11	12:35
MDGLX	012	HB-15 (4-6')-011411	01/14/11	11:40
MDGL1	013	HB-16 (4-6')-011411	01/14/11	11:24
MDGL3	014	HB-A (6-8')-011311	01/13/11	
MDGL4	015	EQUIPMENT BLANK	01/13/11	10:35
MDGMA	016	TB-01	01/14/11	
MDGME	017	TB-02	01/14/11	

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HZW Environmental Consultants

Client Sample ID: HB-02(4-6')-011411

GC/MS Volatiles

Lot-Sample #....: A1A190466-001 **Work Order #....:** MDGK31AC **Matrix.....:** SO
Date Sampled....: 01/14/11 10:20 **Date Received...:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date...:** 01/20/11
Prep Batch #....: 1021283
Dilution Factor: 0.68
% Moisture.....: 18 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	17	ug/kg
Benzene	ND	4.1	ug/kg
Bromodichloromethane	ND	4.1	ug/kg
Bromoform	ND	4.1	ug/kg
Bromomethane	ND	4.1	ug/kg
2-Butanone	ND	17	ug/kg
Carbon disulfide	ND	4.1	ug/kg
Carbon tetrachloride	ND	4.1	ug/kg
Chlorobenzene	ND	4.1	ug/kg
Chloroethane	ND	4.1	ug/kg
Chloroform	ND	4.1	ug/kg
Chloromethane	ND	4.1	ug/kg
Dibromochloromethane	ND	4.1	ug/kg
1,2-Dibromo-3-chloro- propane	ND	8.3	ug/kg
1,2-Dibromoethane	ND	4.1	ug/kg
1,2-Dichlorobenzene	ND	4.1	ug/kg
1,3-Dichlorobenzene	ND	4.1	ug/kg
1,4-Dichlorobenzene	ND	4.1	ug/kg
Dichlorodifluoromethane	ND	4.1	ug/kg
1,1-Dichloroethane	ND	4.1	ug/kg
1,2-Dichloroethane	ND	4.1	ug/kg
1,1-Dichloroethene	ND	4.1	ug/kg
cis-1,2-Dichloroethene	ND	4.1	ug/kg
trans-1,2-Dichloroethene	ND	4.1	ug/kg
1,2-Dichloropropane	ND	4.1	ug/kg
cis-1,3-Dichloropropene	ND	4.1	ug/kg
trans-1,3-Dichloropropene	ND	4.1	ug/kg
Ethylbenzene	ND	4.1	ug/kg
2-Hexanone	ND	17	ug/kg
Isopropylbenzene	ND	4.1	ug/kg
Methylene chloride	ND	4.1	ug/kg
4-Methyl-2-pentanone	ND	17	ug/kg
Methyl tert-butyl ether	ND	17	ug/kg
Styrene	ND	4.1	ug/kg
1,1,2,2-Tetrachloroethane	ND	4.1	ug/kg
Tetrachloroethene	ND	4.1	ug/kg
Toluene	ND	4.1	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-02(4-6')-011411

GC/MS Volatiles

Lot-Sample #....: A1A190466-001 Work Order #....: MDGK31AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	4.1	ug/kg
1,1,1-Trichloroethane	ND	4.1	ug/kg
1,1,2-Trichloroethane	ND	4.1	ug/kg
Trichloroethene	ND	4.1	ug/kg
Trichlorofluoromethane	ND	4.1	ug/kg
Vinyl chloride	ND	4.1	ug/kg
Xylenes (total)	ND	8.3	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	89	(68 - 110)
1,2-Dichloroethane-d4	91	(64 - 110)
Toluene-d8	94	(69 - 128)
4-Bromofluorobenzene	88	(64 - 130)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-02(4-6')-011411

General Chemistry

Lot-Sample #....: A1A190466-001 Work Order #....: MDGK3 Matrix.....: SO
Date Sampled....: 01/14/11 10:20 Date Received...: 01/19/11
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	81.9	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-03(6-8')-011411

GC/MS Volatiles

Lot-Sample #....: A1A190466-002 Work Order #....: MDGLF1AC Matrix.....: SO
 Date Sampled....: 01/14/11 09:50 Date Received...: 01/19/11
 Prep Date.....: 01/20/11 Analysis Date...: 01/20/11
 Prep Batch #....: 1021283
 Dilution Factor: 0.81
 % Moisture.....: 18 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	20	ug/kg
Benzene	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
2-Butanone	ND	20	ug/kg
Carbon disulfide	ND	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromo-3-chloro- propane	ND	9.9	ug/kg
1,2-Dibromoethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	40	5.0	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
2-Hexanone	ND	20	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
Methylene chloride	ND	5.0	ug/kg
4-Methyl-2-pentanone	ND	20	ug/kg
Methyl tert-butyl ether	ND	20	ug/kg
Styrene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-03(6-8')-011411

GC/MS Volatiles

Lot-Sample #....: A1A190466-002 Work Order #....: MDGLF1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	5.0	ug/kg
Vinyl chloride	7.7	5.0	ug/kg
Xylenes (total)	ND	9.9	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	90	(68 - 110)
1,2-Dichloroethane-d4	88	(64 - 110)
Toluene-d8	96	(69 - 128)
4-Bromofluorobenzene	87	(64 - 130)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-03(6-8')-011411

General Chemistry

Lot-Sample #....: A1A190466-002 Work Order #....: MDGLF Matrix.....: SO
Date Sampled....: 01/14/11 09:50 Date Received...: 01/19/11
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	81.6	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-06(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-003 **Work Order #....:** MDGLG1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 14:15 **Date Received...:** 01/19/11
Prep Date.....: 01/20/11 **Analysis Date...:** 01/20/11
Prep Batch #....: 1021283
Dilution Factor: 0.73
% Moisture.....: 15 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	20	17	ug/kg
Benzene	ND	4.3	ug/kg
Bromodichloromethane	ND	4.3	ug/kg
Bromoform	ND	4.3	ug/kg
Bromomethane	ND	4.3	ug/kg
2-Butanone	ND	17	ug/kg
Carbon disulfide	ND	4.3	ug/kg
Carbon tetrachloride	ND	4.3	ug/kg
Chlorobenzene	ND	4.3	ug/kg
Chloroethane	ND	4.3	ug/kg
Chloroform	ND	4.3	ug/kg
Chloromethane	ND	4.3	ug/kg
Dibromochloromethane	ND	4.3	ug/kg
1,2-Dibromo-3-chloro- propane	ND	8.6	ug/kg
1,2-Dibromoethane	ND	4.3	ug/kg
1,2-Dichlorobenzene	ND	4.3	ug/kg
1,3-Dichlorobenzene	ND	4.3	ug/kg
1,4-Dichlorobenzene	ND	4.3	ug/kg
Dichlorodifluoromethane	ND	4.3	ug/kg
1,1-Dichloroethane	ND	4.3	ug/kg
1,2-Dichloroethane	ND	4.3	ug/kg
1,1-Dichloroethene	ND	4.3	ug/kg
cis-1,2-Dichloroethene	ND	4.3	ug/kg
trans-1,2-Dichloroethene	ND	4.3	ug/kg
1,2-Dichloropropane	ND	4.3	ug/kg
cis-1,3-Dichloropropene	ND	4.3	ug/kg
trans-1,3-Dichloropropene	ND	4.3	ug/kg
Ethylbenzene	ND	4.3	ug/kg
2-Hexanone	ND	17	ug/kg
Isopropylbenzene	ND	4.3	ug/kg
Methylene chloride	ND	4.3	ug/kg
4-Methyl-2-pentanone	ND	17	ug/kg
Methyl tert-butyl ether	ND	17	ug/kg
Styrene	ND	4.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	4.3	ug/kg
Tetrachloroethene	ND	4.3	ug/kg
Toluene	ND	4.3	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-06(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-003 Work Order #....: MDGLG1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	4.3	ug/kg
1,1,1-Trichloroethane	ND	4.3	ug/kg
1,1,2-Trichloroethane	ND	4.3	ug/kg
Trichloroethene	ND	4.3	ug/kg
Trichlorofluoromethane	ND	4.3	ug/kg
Vinyl chloride	ND	4.3	ug/kg
Xylenes (total)	ND	8.6	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	92	(68 - 110)
1,2-Dichloroethane-d4	90	(64 - 110)
Toluene-d8	93	(69 - 128)
4-Bromofluorobenzene	87	(64 - 130)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-06(6-8')-011311

General Chemistry

Lot-Sample #...: A1A190466-003 Work Order #...: MDGLG Matrix.....: SO
Date Sampled...: 01/13/11 14:15 Date Received...: 01/19/11
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	85.3	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-07(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-004 **Work Order #....:** MDGLH1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 13:49 **Date Received...:** 01/19/11
Prep Date.....: 01/21/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1021283
Dilution Factor: 0.91
% Moisture.....: 18 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	22	ug/kg
Benzene	ND	5.6	ug/kg
Bromodichloromethane	ND	5.6	ug/kg
Bromoform	ND	5.6	ug/kg
Bromomethane	ND	5.6	ug/kg
2-Butanone	ND	22	ug/kg
Carbon disulfide	ND	5.6	ug/kg
Carbon tetrachloride	ND	5.6	ug/kg
Chlorobenzene	ND	5.6	ug/kg
Chloroethane	ND	5.6	ug/kg
Chloroform	ND	5.6	ug/kg
Chloromethane	ND	5.6	ug/kg
Dibromochloromethane	ND	5.6	ug/kg
1,2-Dibromo-3-chloro- propane	ND	11	ug/kg
1,2-Dibromoethane	ND	5.6	ug/kg
1,2-Dichlorobenzene	ND	5.6	ug/kg
1,3-Dichlorobenzene	ND	5.6	ug/kg
1,4-Dichlorobenzene	ND	5.6	ug/kg
Dichlorodifluoromethane	ND	5.6	ug/kg
1,1-Dichloroethane	ND	5.6	ug/kg
1,2-Dichloroethane	ND	5.6	ug/kg
1,1-Dichloroethene	ND	5.6	ug/kg
cis-1,2-Dichloroethene	ND	5.6	ug/kg
trans-1,2-Dichloroethene	ND	5.6	ug/kg
1,2-Dichloropropane	ND	5.6	ug/kg
cis-1,3-Dichloropropene	ND	5.6	ug/kg
trans-1,3-Dichloropropene	ND	5.6	ug/kg
Ethylbenzene	ND	5.6	ug/kg
2-Hexanone	ND	22	ug/kg
Isopropylbenzene	ND	5.6	ug/kg
Methylene chloride	ND	5.6	ug/kg
4-Methyl-2-pentanone	ND	22	ug/kg
Methyl tert-butyl ether	ND	22	ug/kg
Styrene	ND	5.6	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg
Tetrachloroethene	5.8	5.6	ug/kg
Toluene	ND	5.6	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-07(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-004 Work Order #....: MDGLH1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	5.6	ug/kg
1,1,1-Trichloroethane	ND	5.6	ug/kg
1,1,2-Trichloroethane	ND	5.6	ug/kg
Trichloroethene	ND	5.6	ug/kg
Trichlorofluoromethane	ND	5.6	ug/kg
Vinyl chloride	ND	5.6	ug/kg
Xylenes (total)	ND	11	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	87	(68 - 110)
1,2-Dichloroethane-d4	84	(64 - 110)
Toluene-d8	95	(69 - 128)
4-Bromofluorobenzene	79	(64 - 130)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-07(6-8')-011311

General Chemistry

Lot-Sample #....: A1A190466-004 **Work Order #....:** MDGLH **Matrix.....:** SO
Date Sampled....: 01/13/11 13:49 **Date Received...:** 01/19/11
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	81.7	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-08(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-005 **Work Order #....:** MDGLL1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 13:35 **Date Received...:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1024167
Dilution Factor: 9.9
% Moisture.....: 17 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	12000	ug/kg
Benzene	ND	3000	ug/kg
Bromodichloromethane	ND	3000	ug/kg
Bromoform	ND	3000	ug/kg
Bromomethane	ND	3000	ug/kg
2-Butanone	ND	12000	ug/kg
Carbon disulfide	ND	3000	ug/kg
Carbon tetrachloride	ND	3000	ug/kg
Chlorobenzene	ND	3000	ug/kg
Dibromochloromethane	ND	3000	ug/kg
1,2-Dibromo-3-chloro-propane	ND	5900	ug/kg
Chloroethane	ND	3000	ug/kg
Chloroform	ND	3000	ug/kg
Chloromethane	ND	3000	ug/kg
1,2-Dibromoethane	ND	3000	ug/kg
1,2-Dichlorobenzene	ND	3000	ug/kg
1,3-Dichlorobenzene	ND	3000	ug/kg
1,4-Dichlorobenzene	ND	3000	ug/kg
Dichlorodifluoromethane	ND	3000	ug/kg
1,1-Dichloroethane	ND	3000	ug/kg
1,2-Dichloroethane	ND	3000	ug/kg
1,1-Dichloroethene	ND	3000	ug/kg
cis-1,2-Dichloroethene	15000	3000	ug/kg
trans-1,2-Dichloroethene	ND	3000	ug/kg
1,2-Dichloropropane	ND	3000	ug/kg
cis-1,3-Dichloropropene	ND	3000	ug/kg
trans-1,3-Dichloropropene	ND	3000	ug/kg
Ethylbenzene	ND	3000	ug/kg
Trichlorofluoromethane	ND	3000	ug/kg
2-Hexanone	ND	12000	ug/kg
Isopropylbenzene	ND	3000	ug/kg
Methylene chloride	ND	3000	ug/kg
4-Methyl-2-pentanone	ND	12000	ug/kg
Styrene	ND	3000	ug/kg
1,1,2,2-Tetrachloroethane	ND	3000	ug/kg
Tetrachloroethene	97000	3000	ug/kg
Toluene	ND	3000	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-08(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-005 Work Order #....: MDGLL1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	3000	ug/kg
1,1,1-Trichloroethane	ND	3000	ug/kg
1,1,2-Trichloroethane	ND	3000	ug/kg
Trichloroethene	13000	3000	ug/kg
Vinyl chloride	ND	3000	ug/kg
Xylenes (total)	ND	5900	ug/kg
Methyl tert-butyl ether	ND	12000	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	72 DIL	(30 - 122)
1,2-Dichloroethane-d4	81 DIL	(39 - 128)
Toluene-d8	69 DIL	(33 - 134)
4-Bromofluorobenzene	73 DIL	(26 - 141)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-08(6-8')-011311

General Chemistry

Lot-Sample #....: A1A190466-005 Work Order #....: MDGLL Matrix.....: SO
Date Sampled....: 01/13/11 13:35 Date Received...: 01/19/11
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	83.2	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-09(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-006 **Work Order #....:** MDGLM1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 11:10 **Date Received...:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1024167
Dilution Factor: 0.75
% Moisture.....: 15 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	880	ug/kg
Benzene	ND	220	ug/kg
Bromodichloromethane	ND	220	ug/kg
Bromoform	ND	220	ug/kg
Bromomethane	ND	220	ug/kg
2-Butanone	ND	880	ug/kg
Carbon disulfide	ND	220	ug/kg
Carbon tetrachloride	ND	220	ug/kg
Chlorobenzene	ND	220	ug/kg
Dibromochloromethane	ND	220	ug/kg
1,2-Dibromo-3-chloro- propane	ND	440	ug/kg
Chloroethane	ND	220	ug/kg
Chloroform	ND	220	ug/kg
Chloromethane	ND	220	ug/kg
1,2-Dibromoethane	ND	220	ug/kg
1,2-Dichlorobenzene	ND	220	ug/kg
1,3-Dichlorobenzene	ND	220	ug/kg
1,4-Dichlorobenzene	ND	220	ug/kg
Dichlorodifluoromethane	ND	220	ug/kg
1,1-Dichloroethane	ND	220	ug/kg
1,2-Dichloroethane	ND	220	ug/kg
1,1-Dichloroethene	ND	220	ug/kg
cis-1,2-Dichloroethene	5100	220	ug/kg
trans-1,2-Dichloroethene	ND	220	ug/kg
1,2-Dichloropropane	ND	220	ug/kg
cis-1,3-Dichloropropene	ND	220	ug/kg
trans-1,3-Dichloropropene	ND	220	ug/kg
Ethylbenzene	ND	220	ug/kg
Trichlorofluoromethane	ND	220	ug/kg
2-Hexanone	ND	880	ug/kg
Isopropylbenzene	ND	220	ug/kg
Methylene chloride	ND	220	ug/kg
4-Methyl-2-pentanone	ND	880	ug/kg
Styrene	ND	220	ug/kg
1,1,2,2-Tetrachloroethane	ND	220	ug/kg
Tetrachloroethene	ND	220	ug/kg
Toluene	ND	220	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-09(6-8')-011311

GC/MS Volatiles

Lot-Sample #...: A1A190466-006 Work Order #...: MDGLM1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	220	ug/kg
1,1,1-Trichloroethane	ND	220	ug/kg
1,1,2-Trichloroethane	ND	220	ug/kg
Trichloroethene	ND	220	ug/kg
Vinyl chloride	ND	220	ug/kg
Xylenes (total)	ND	440	ug/kg
Methyl tert-butyl ether	ND	880	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	72	(30 - 122)
1,2-Dichloroethane-d4	71	(39 - 128)
Toluene-d8	75	(33 - 134)
4-Bromofluorobenzene	68	(26 - 141)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-09(6-8')-011311

General Chemistry

Lot-Sample #....: A1A190466-006 Work Order #....: MDGLM Matrix.....: SO
 Date Sampled....: 01/13/11 11:10 Date Received...: 01/19/11
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	85.2	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-10(8-10')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-007 **Work Order #....:** MDGLN1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 11:38 **Date Received...:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1024167
Dilution Factor: 0.79
% Moisture.....: 14 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	920	ug/kg
Benzene	ND	230	ug/kg
Bromodichloromethane	ND	230	ug/kg
Bromoform	ND	230	ug/kg
Bromomethane	ND	230	ug/kg
2-Butanone	ND	920	ug/kg
Carbon disulfide	ND	230	ug/kg
Carbon tetrachloride	ND	230	ug/kg
Chlorobenzene	ND	230	ug/kg
Dibromochloromethane	ND	230	ug/kg
1,2-Dibromo-3-chloro- propane	ND	460	ug/kg
Chloroethane	ND	230	ug/kg
Chloroform	ND	230	ug/kg
Chloromethane	ND	230	ug/kg
1,2-Dibromoethane	ND	230	ug/kg
1,2-Dichlorobenzene	ND	230	ug/kg
1,3-Dichlorobenzene	ND	230	ug/kg
1,4-Dichlorobenzene	ND	230	ug/kg
Dichlorodifluoromethane	ND	230	ug/kg
1,1-Dichloroethane	ND	230	ug/kg
1,2-Dichloroethane	ND	230	ug/kg
1,1-Dichloroethene	ND	230	ug/kg
cis-1,2-Dichloroethene	740	230	ug/kg
trans-1,2-Dichloroethene	ND	230	ug/kg
1,2-Dichloropropane	ND	230	ug/kg
cis-1,3-Dichloropropene	ND	230	ug/kg
trans-1,3-Dichloropropene	ND	230	ug/kg
Ethylbenzene	ND	230	ug/kg
Trichlorofluoromethane	ND	230	ug/kg
2-Hexanone	ND	920	ug/kg
Isopropylbenzene	ND	230	ug/kg
Methylene chloride	ND	230	ug/kg
4-Methyl-2-pentanone	ND	920	ug/kg
Styrene	ND	230	ug/kg
1,1,2,2-Tetrachloroethane	ND	230	ug/kg
Tetrachloroethene	ND	230	ug/kg
Toluene	ND	230	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-10(8-10')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-007 Work Order #....: MDGLN1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	230	ug/kg
1,1,1-Trichloroethane	ND	230	ug/kg
1,1,2-Trichloroethane	ND	230	ug/kg
Trichloroethene	1600	230	ug/kg
Vinyl chloride	ND	230	ug/kg
Xylenes (total)	ND	460	ug/kg
Methyl tert-butyl ether	ND	920	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	73	(30 - 122)
1,2-Dichloroethane-d4	75	(39 - 128)
Toluene-d8	76	(33 - 134)
4-Bromofluorobenzene	69	(26 - 141)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-10(8-10')-011311

General Chemistry

Lot-Sample #....: A1A190466-007 Work Order #....: MDGLN Matrix.....: SO
Date Sampled...: 01/13/11 11:38 Date Received...: 01/19/11
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	85.6	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-11(8-10')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-008 **Work Order #....:** MDGLQ1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 11:55 **Date Received...:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date...:** 01/24/11
Prep Batch #....: 1024167
Dilution Factor: 7.02
% Moisture.....: 15 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	8200	ug/kg
Benzene	ND	2100	ug/kg
Bromodichloromethane	ND	2100	ug/kg
Bromoform	ND	2100	ug/kg
Bromomethane	ND	2100	ug/kg
2-Butanone	ND	8200	ug/kg
Carbon disulfide	ND	2100	ug/kg
Carbon tetrachloride	ND	2100	ug/kg
Chlorobenzene	ND	2100	ug/kg
Dibromochloromethane	ND	2100	ug/kg
1,2-Dibromo-3-chloro- propane	ND	4100	ug/kg
Chloroethane	ND	2100	ug/kg
Chloroform	ND	2100	ug/kg
Chloromethane	ND	2100	ug/kg
1,2-Dibromoethane	ND	2100	ug/kg
1,2-Dichlorobenzene	ND	2100	ug/kg
1,3-Dichlorobenzene	ND	2100	ug/kg
1,4-Dichlorobenzene	ND	2100	ug/kg
Dichlorodifluoromethane	ND	2100	ug/kg
1,1-Dichloroethane	ND	2100	ug/kg
1,2-Dichloroethane	ND	2100	ug/kg
1,1-Dichloroethene	ND	2100	ug/kg
cis-1,2-Dichloroethene	ND	2100	ug/kg
trans-1,2-Dichloroethene	ND	2100	ug/kg
1,2-Dichloropropane	ND	2100	ug/kg
cis-1,3-Dichloropropene	ND	2100	ug/kg
trans-1,3-Dichloropropene	ND	2100	ug/kg
Ethylbenzene	ND	2100	ug/kg
Trichlorofluoromethane	ND	2100	ug/kg
2-Hexanone	ND	8200	ug/kg
Isopropylbenzene	ND	2100	ug/kg
Methylene chloride	ND	2100	ug/kg
4-Methyl-2-pentanone	ND	8200	ug/kg
Styrene	ND	2100	ug/kg
1,1,2,2-Tetrachloroethane	ND	2100	ug/kg
Tetrachloroethene	67000	2100	ug/kg
Toluene	ND	2100	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-11(8-10')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-008 Work Order #....: MDGLQ1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	2100	ug/kg
1,1,1-Trichloroethane	ND	2100	ug/kg
1,1,2-Trichloroethane	ND	2100	ug/kg
Trichloroethene	2400	2100	ug/kg
Vinyl chloride	ND	2100	ug/kg
Xylenes (total)	ND	4100	ug/kg
Methyl tert-butyl ether	ND	8200	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	79 DIL	(30 - 122)
1,2-Dichloroethane-d4	85 DIL	(39 - 128)
Toluene-d8	71 DIL	(33 - 134)
4-Bromofluorobenzene	67 DIL	(26 - 141)

NOTE(S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-11(8-10')-011311

General Chemistry

Lot-Sample #....: A1A190466-008 Work Order #....: MDGLQ Matrix.....: SO
Date Sampled....: 01/13/11 11:55 Date Received...: 01/19/11
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	85.3	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-12(0-2')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-009 **Work Order #....:** MDGLR1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 13:10 **Date Received...:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1024167
Dilution Factor: 1.42
% Moisture.....: 12 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	1600	ug/kg
Benzene	ND	400	ug/kg
Bromodichloromethane	ND	400	ug/kg
Bromoform	ND	400	ug/kg
Bromomethane	ND	400	ug/kg
2-Butanone	ND	1600	ug/kg
Carbon disulfide	ND	400	ug/kg
Carbon tetrachloride	ND	400	ug/kg
Chlorobenzene	ND	400	ug/kg
Dibromochloromethane	ND	400	ug/kg
1,2-Dibromo-3-chloro- propane	ND	810	ug/kg
Chloroethane	ND	400	ug/kg
Chloroform	ND	400	ug/kg
Chloromethane	ND	400	ug/kg
1,2-Dibromoethane	ND	400	ug/kg
1,2-Dichlorobenzene	ND	400	ug/kg
1,3-Dichlorobenzene	ND	400	ug/kg
1,4-Dichlorobenzene	ND	400	ug/kg
Dichlorodifluoromethane	ND	400	ug/kg
1,1-Dichloroethane	ND	400	ug/kg
1,2-Dichloroethane	ND	400	ug/kg
1,1-Dichloroethene	ND	400	ug/kg
cis-1,2-Dichloroethene	840	400	ug/kg
trans-1,2-Dichloroethene	ND	400	ug/kg
1,2-Dichloropropane	ND	400	ug/kg
cis-1,3-Dichloropropene	ND	400	ug/kg
trans-1,3-Dichloropropene	ND	400	ug/kg
Ethylbenzene	ND	400	ug/kg
Trichlorofluoromethane	ND	400	ug/kg
2-Hexanone	ND	1600	ug/kg
Isopropylbenzene	ND	400	ug/kg
Methylene chloride	ND	400	ug/kg
4-Methyl-2-pentanone	ND	1600	ug/kg
Styrene	ND	400	ug/kg
1,1,2,2-Tetrachloroethane	ND	400	ug/kg
Tetrachloroethene	1600	400	ug/kg
Toluene	ND	400	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-12(0-2')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-009 Work Order #....: MDGLR1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	400	ug/kg
1,1,1-Trichloroethane	ND	400	ug/kg
1,1,2-Trichloroethane	ND	400	ug/kg
Trichloroethene	ND	400	ug/kg
Vinyl chloride	ND	400	ug/kg
Xylenes (total)	ND	810	ug/kg
Methyl tert-butyl ether	ND	1600	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	79	(30 - 122)
1,2-Dichloroethane-d4	84	(39 - 128)
Toluene-d8	83	(33 - 134)
4-Bromofluorobenzene	78	(26 - 141)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-12(0-2')-011311

General Chemistry

Lot-Sample #....: A1A190466-009 Work Order #....: MDGLR Matrix.....: SO
Date Sampled....: 01/13/11 13:10 Date Received...: 01/19/11
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	87.9	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-13(4-6')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-010 **Work Order #....:** MDGLT1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 12:05 **Date Received...:** 01/19/11
Prep Date.....: 01/21/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1021283
Dilution Factor: 0.81
% Moisture.....: 27 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	22	ug/kg
Benzene	ND	5.6	ug/kg
Bromodichloromethane	ND	5.6	ug/kg
Bromoform	ND	5.6	ug/kg
Bromomethane	ND	5.6	ug/kg
2-Butanone	ND	22	ug/kg
Carbon disulfide	8.8	5.6	ug/kg
Carbon tetrachloride	ND	5.6	ug/kg
Chlorobenzene	ND	5.6	ug/kg
Chloroethane	ND	5.6	ug/kg
Chloroform	ND	5.6	ug/kg
Chloromethane	ND	5.6	ug/kg
Dibromochloromethane	ND	5.6	ug/kg
1,2-Dibromo-3-chloro-propane	ND	11	ug/kg
1,2-Dibromoethane	ND	5.6	ug/kg
1,2-Dichlorobenzene	ND	5.6	ug/kg
1,3-Dichlorobenzene	ND	5.6	ug/kg
1,4-Dichlorobenzene	ND	5.6	ug/kg
Dichlorodifluoromethane	ND	5.6	ug/kg
1,1-Dichloroethane	ND	5.6	ug/kg
1,2-Dichloroethane	ND	5.6	ug/kg
1,1-Dichloroethene	ND	5.6	ug/kg
cis-1,2-Dichloroethene	53	5.6	ug/kg
trans-1,2-Dichloroethene	ND	5.6	ug/kg
1,2-Dichloropropane	ND	5.6	ug/kg
cis-1,3-Dichloropropene	ND	5.6	ug/kg
trans-1,3-Dichloropropene	ND	5.6	ug/kg
Ethylbenzene	ND	5.6	ug/kg
2-Hexanone	ND	22	ug/kg
Isopropylbenzene	ND	5.6	ug/kg
Methylene chloride	ND	5.6	ug/kg
4-Methyl-2-pentanone	ND	22	ug/kg
Methyl tert-butyl ether	ND	22	ug/kg
Styrene	ND	5.6	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg
Tetrachloroethene	ND	5.6	ug/kg
Toluene	11	5.6	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-13(4-6')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-010 Work Order #....: MDGLT1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	5.6	ug/kg
1,1,1-Trichloroethane	ND	5.6	ug/kg
1,1,2-Trichloroethane	ND	5.6	ug/kg
Trichloroethene	ND	5.6	ug/kg
Trichlorofluoromethane	ND	5.6	ug/kg
Vinyl chloride	ND	5.6	ug/kg
Xylenes (total)	ND	11	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	88	(68 - 110)
1,2-Dichloroethane-d4	84	(64 - 110)
Toluene-d8	91	(69 - 128)
4-Bromofluorobenzene	81	(64 - 130)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-13(4-6')-011311

General Chemistry

Lot-Sample #....: A1A190466-010 Work Order #....: MDGLT Matrix.....: SO
Date Sampled....: 01/13/11 12:05 Date Received...: 01/19/11
% Moisture.....: 27

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	72.7	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-14(8-10')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-011 **Work Order #....:** MDGLW1AC **Matrix.....:** SO
Date Sampled....: 01/13/11 12:35 **Date Received...:** 01/19/11
Prep Date.....: 01/19/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1024167
Dilution Factor: 0.81
% Moisture.....: 13 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	940	ug/kg
Benzene	ND	230	ug/kg
Bromodichloromethane	ND	230	ug/kg
Bromoform	ND	230	ug/kg
Bromomethane	ND	230	ug/kg
2-Butanone	ND	940	ug/kg
Carbon disulfide	ND	230	ug/kg
Carbon tetrachloride	ND	230	ug/kg
Chlorobenzene	ND	230	ug/kg
Dibromochloromethane	ND	230	ug/kg
1,2-Dibromo-3-chloro- propane	ND	470	ug/kg
Chloroethane	ND	230	ug/kg
Chloroform	ND	230	ug/kg
Chloromethane	ND	230	ug/kg
1,2-Dibromoethane	ND	230	ug/kg
1,2-Dichlorobenzene	ND	230	ug/kg
1,3-Dichlorobenzene	ND	230	ug/kg
1,4-Dichlorobenzene	ND	230	ug/kg
Dichlorodifluoromethane	ND	230	ug/kg
1,1-Dichloroethane	ND	230	ug/kg
1,2-Dichloroethane	ND	230	ug/kg
1,1-Dichloroethene	ND	230	ug/kg
cis-1,2-Dichloroethene	1300	230	ug/kg
trans-1,2-Dichloroethene	ND	230	ug/kg
1,2-Dichloropropane	ND	230	ug/kg
cis-1,3-Dichloropropene	ND	230	ug/kg
trans-1,3-Dichloropropene	ND	230	ug/kg
Ethylbenzene	ND	230	ug/kg
Trichlorofluoromethane	ND	230	ug/kg
2-Hexanone	ND	940	ug/kg
Isopropylbenzene	ND	230	ug/kg
Methylene chloride	ND	230	ug/kg
4-Methyl-2-pentanone	ND	940	ug/kg
Styrene	ND	230	ug/kg
1,1,2,2-Tetrachloroethane	ND	230	ug/kg
Tetrachloroethene	ND	230	ug/kg
Toluene	ND	230	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-14(8-10')-011311

GC/MS Volatiles

Lot-Sample #...: A1A190466-011 Work Order #...: MDGLW1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	230	ug/kg
1,1,1-Trichloroethane	ND	230	ug/kg
1,1,2-Trichloroethane	ND	230	ug/kg
Trichloroethene	ND	230	ug/kg
Vinyl chloride	ND	230	ug/kg
Xylenes (total)	ND	470	ug/kg
Methyl tert-butyl ether	ND	940	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	74	(30 - 122)
1,2-Dichloroethane-d4	76	(39 - 128)
Toluene-d8	75	(33 - 134)
4-Bromofluorobenzene	73	(26 - 141)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-14(8-10')-011311

General Chemistry

Lot-Sample #....: A1A190466-011 Work Order #....: MDGLW Matrix.....: SO
Date Sampled....: 01/13/11 12:35 Date Received...: 01/19/11
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	86.6	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-15(4-6')-011411

GC/MS Volatiles

Lot-Sample #....: A1A190466-012 **Work Order #....:** MDGLX1AC **Matrix.....:** SO
Date Sampled....: 01/14/11 11:40 **Date Received...:** 01/19/11
Prep Date.....: 01/21/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1021283
Dilution Factor: 0.78
% Moisture.....: 22 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	20	ug/kg
Benzene	ND	5.0	ug/kg
Bromodichloromethane	ND	5.0	ug/kg
Bromoform	ND	5.0	ug/kg
Bromomethane	ND	5.0	ug/kg
2-Butanone	ND	20	ug/kg
Carbon disulfide	12	5.0	ug/kg
Carbon tetrachloride	ND	5.0	ug/kg
Chlorobenzene	ND	5.0	ug/kg
Chloroethane	ND	5.0	ug/kg
Chloroform	ND	5.0	ug/kg
Chloromethane	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	ug/kg
1,2-Dibromo-3-chloro- propane	ND	10	ug/kg
1,2-Dibromoethane	ND	5.0	ug/kg
1,2-Dichlorobenzene	ND	5.0	ug/kg
1,3-Dichlorobenzene	ND	5.0	ug/kg
1,4-Dichlorobenzene	ND	5.0	ug/kg
Dichlorodifluoromethane	ND	5.0	ug/kg
1,1-Dichloroethane	ND	5.0	ug/kg
1,2-Dichloroethane	ND	5.0	ug/kg
1,1-Dichloroethene	ND	5.0	ug/kg
cis-1,2-Dichloroethene	ND	5.0	ug/kg
trans-1,2-Dichloroethene	ND	5.0	ug/kg
1,2-Dichloropropane	ND	5.0	ug/kg
cis-1,3-Dichloropropene	ND	5.0	ug/kg
trans-1,3-Dichloropropene	ND	5.0	ug/kg
Ethylbenzene	ND	5.0	ug/kg
2-Hexanone	ND	20	ug/kg
Isopropylbenzene	ND	5.0	ug/kg
Methylene chloride	ND	5.0	ug/kg
4-Methyl-2-pentanone	ND	20	ug/kg
Methyl tert-butyl ether	ND	20	ug/kg
Styrene	ND	5.0	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg
Tetrachloroethene	ND	5.0	ug/kg
Toluene	ND	5.0	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-15(4-6')-011411

GC/MS Volatiles

Lot-Sample #....: A1A190466-012 Work Order #....: MDGLX1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	5.0	ug/kg
1,1,1-Trichloroethane	ND	5.0	ug/kg
1,1,2-Trichloroethane	ND	5.0	ug/kg
Trichloroethene	ND	5.0	ug/kg
Trichlorofluoromethane	ND	5.0	ug/kg
Vinyl chloride	ND	5.0	ug/kg
Xylenes (total)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	89	(68 - 110)
1,2-Dichloroethane-d4	89	(64 - 110)
Toluene-d8	92	(69 - 128)
4-Bromofluorobenzene	83	(64 - 130)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-15(4-6')-011411

General Chemistry

Lot-Sample #....: A1A190466-012 Work Order #....: MDGLX Matrix.....: SO
Date Sampled....: 01/14/11 11:40 Date Received...: 01/19/11
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	78.0	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-16(4-6')-011411

GC/MS Volatiles

Lot-Sample #....: A1A190466-013 **Work Order #....:** MDGL11AC **Matrix.....:** SO
Date Sampled....: 01/14/11 11:24 **Date Received...:** 01/19/11
Prep Date.....: 01/21/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1021283
Dilution Factor: 0.76
% Moisture.....: 20 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	19	ug/kg
Benzene	ND	4.7	ug/kg
Bromodichloromethane	ND	4.7	ug/kg
Bromoform	ND	4.7	ug/kg
Bromomethane	ND	4.7	ug/kg
2-Butanone	ND	19	ug/kg
Carbon disulfide	ND	4.7	ug/kg
Carbon tetrachloride	ND	4.7	ug/kg
Chlorobenzene	ND	4.7	ug/kg
Chloroethane	ND	4.7	ug/kg
Chloroform	ND	4.7	ug/kg
Chloromethane	ND	4.7	ug/kg
Dibromochloromethane	ND	4.7	ug/kg
1,2-Dibromo-3-chloro- propane	ND	9.5	ug/kg
1,2-Dibromoethane	ND	4.7	ug/kg
1,2-Dichlorobenzene	ND	4.7	ug/kg
1,3-Dichlorobenzene	ND	4.7	ug/kg
1,4-Dichlorobenzene	ND	4.7	ug/kg
Dichlorodifluoromethane	ND	4.7	ug/kg
1,1-Dichloroethane	ND	4.7	ug/kg
1,2-Dichloroethane	ND	4.7	ug/kg
1,1-Dichloroethene	ND	4.7	ug/kg
cis-1,2-Dichloroethene	ND	4.7	ug/kg
trans-1,2-Dichloroethene	ND	4.7	ug/kg
1,2-Dichloropropane	ND	4.7	ug/kg
cis-1,3-Dichloropropene	ND	4.7	ug/kg
trans-1,3-Dichloropropene	ND	4.7	ug/kg
Ethylbenzene	ND	4.7	ug/kg
2-Hexanone	ND	19	ug/kg
Isopropylbenzene	ND	4.7	ug/kg
Methylene chloride	ND	4.7	ug/kg
4-Methyl-2-pentanone	ND	19	ug/kg
Methyl tert-butyl ether	ND	19	ug/kg
Styrene	ND	4.7	ug/kg
1,1,2,2-Tetrachloroethane	ND	4.7	ug/kg
Tetrachloroethene	ND	4.7	ug/kg
Toluene	ND	4.7	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-16(4-6')-011411

GC/MS Volatiles

Lot-Sample #...: A1A190466-013 Work Order #...: MDGL11AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	4.7	ug/kg
1,1,1-Trichloroethane	ND	4.7	ug/kg
1,1,2-Trichloroethane	ND	4.7	ug/kg
Trichloroethene	ND	4.7	ug/kg
Trichlorofluoromethane	ND	4.7	ug/kg
Vinyl chloride	ND	4.7	ug/kg
Xylenes (total)	ND	9.5	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	93	(68 - 110)
1,2-Dichloroethane-d4	90	(64 - 110)
Toluene-d8	90	(69 - 128)
4-Bromofluorobenzene	84	(64 - 130)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-16(4-6')-011411

General Chemistry

Lot-Sample #....: A1A190466-013 Work Order #....: MDGL1 Matrix.....: SO
Date Sampled....: 01/14/11 11:24 Date Received...: 01/19/11
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	80.3	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-A(6-8')-011311

GC/MS Volatiles

Lot-Sample #....: A1A190466-014 **Work Order #....:** MDGL31AC **Matrix.....:** SO
Date Sampled....: 01/13/11 **Date Received...:** 01/19/11
Prep Date.....: 01/21/11 **Analysis Date...:** 01/21/11
Prep Batch #....: 1021283
Dilution Factor: 0.77
% Moisture.....: 15 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	18	ug/kg
Benzene	ND	4.5	ug/kg
Bromodichloromethane	ND	4.5	ug/kg
Bromoform	ND	4.5	ug/kg
Bromomethane	ND	4.5	ug/kg
2-Butanone	ND	18	ug/kg
Carbon disulfide	ND	4.5	ug/kg
Carbon tetrachloride	ND	4.5	ug/kg
Chlorobenzene	ND	4.5	ug/kg
Chloroethane	ND	4.5	ug/kg
Chloroform	ND	4.5	ug/kg
Chloromethane	ND	4.5	ug/kg
Dibromochloromethane	ND	4.5	ug/kg
1,2-Dibromo-3-chloro- propane	ND	9.1	ug/kg
1,2-Dibromoethane	ND	4.5	ug/kg
1,2-Dichlorobenzene	ND	4.5	ug/kg
1,3-Dichlorobenzene	ND	4.5	ug/kg
1,4-Dichlorobenzene	ND	4.5	ug/kg
Dichlorodifluoromethane	ND	4.5	ug/kg
1,1-Dichloroethane	ND	4.5	ug/kg
1,2-Dichloroethane	ND	4.5	ug/kg
1,1-Dichloroethene	ND	4.5	ug/kg
cis-1,2-Dichloroethene	ND	4.5	ug/kg
trans-1,2-Dichloroethene	ND	4.5	ug/kg
1,2-Dichloropropane	ND	4.5	ug/kg
cis-1,3-Dichloropropene	ND	4.5	ug/kg
trans-1,3-Dichloropropene	ND	4.5	ug/kg
Ethylbenzene	ND	4.5	ug/kg
2-Hexanone	ND	18	ug/kg
Isopropylbenzene	ND	4.5	ug/kg
Methylene chloride	ND	4.5	ug/kg
4-Methyl-2-pentanone	ND	18	ug/kg
Methyl tert-butyl ether	ND	18	ug/kg
Styrene	ND	4.5	ug/kg
1,1,2,2-Tetrachloroethane	ND	4.5	ug/kg
Tetrachloroethene	ND	4.5	ug/kg
Toluene	4.9	4.5	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-A(6-8')-011311

GC/MS Volatiles

Lot-Sample #...: A1A190466-014 Work Order #...: MDGL31AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	4.5	ug/kg
1,1,1-Trichloroethane	ND	4.5	ug/kg
1,1,2-Trichloroethane	ND	4.5	ug/kg
Trichloroethene	ND	4.5	ug/kg
Trichlorofluoromethane	ND	4.5	ug/kg
Vinyl chloride	ND	4.5	ug/kg
Xylenes (total)	ND	9.1	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	92	(68 - 110)
1,2-Dichloroethane-d4	91	(64 - 110)
Toluene-d8	87	(69 - 128)
4-Bromofluorobenzene	85	(64 - 130)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-A(6-8')-011311

General Chemistry

Lot-Sample #...: A1A190466-014 Work Order #...: MDGL3 Matrix.....: SO
Date Sampled...: 01/13/11 Date Received...: 01/19/11
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	84.8	10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: EQUIPMENT BLANK

GC/MS Volatiles

Lot-Sample #....: A1A190466-015 **Work Order #....:** MDGL41AA **Matrix.....:** WQ
Date Sampled....: 01/13/11 10:35 **Date Received...:** 01/19/11
Prep Date.....: 01/24/11 **Analysis Date...:** 01/24/11
Prep Batch #....: 1025236
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	10	ug/L
Benzene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
2-Butanone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
2-Hexanone	ND	10	ug/L
Isopropylbenzene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Styrene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: EQUIPMENT BLANK

GC/MS Volatiles

Lot-Sample #....: A1A190466-015 Work Order #....: MDGL41AA Matrix.....: WQ

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	97	(75 - 121)
1,2-Dichloroethane-d4	94	(63 - 129)
Toluene-d8	88	(74 - 115)
4-Bromofluorobenzene	89	(66 - 117)

HZW Environmental Consultants

Client Sample ID: TB-01

GC/MS Volatiles

Lot-Sample #....: A1A190466-016	Work Order #....: MDGMA1AA	Matrix.....: WQ
Date Sampled....: 01/14/11	Date Received...: 01/19/11	
Prep Date.....: 01/24/11	Analysis Date...: 01/24/11	
Prep Batch #....: 1025236		
Dilution Factor: 1	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	14	10	ug/L
Benzene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
2-Butanone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
2-Hexanone	ND	10	ug/L
Isopropylbenzene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Styrene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: TB-01

GC/MS Volatiles

Lot-Sample #....: A1A190466-016 Work Order #....: MDGMA1AA Matrix.....: WQ

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	96	(75 - 121)
1,2-Dichloroethane-d4	95	(63 - 129)
Toluene-d8	92	(74 - 115)
4-Bromofluorobenzene	88	(66 - 117)

HZW Environmental Consultants

Client Sample ID: TB-02

GC/MS Volatiles

Lot-Sample #....: A1A190466-017 **Work Order #....:** MDGME1AA **Matrix.....:** WQ
Date Sampled....: 01/14/11 **Date Received...:** 01/19/11
Prep Date.....: 01/24/11 **Analysis Date...:** 01/24/11
Prep Batch #....: 1025236
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	15	10	ug/L
Benzene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
2-Butanone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
2-Hexanone	ND	10	ug/L
Isopropylbenzene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Styrene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: TB-02

GC/MS Volatiles

Lot-Sample #....: A1A190466-017 Work Order #....: MDGME1AA Matrix.....: WQ

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	98	(75 - 121)
1,2-Dichloroethane-d4	96	(63 - 129)
Toluene-d8	92	(74 - 115)
4-Bromofluorobenzene	86	(66 - 117)

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: A1A190466
MB Lot-Sample #: A1A210000-283

Work Order #....: MDLG91AA

Matrix.....: SOLID

Analysis Date...: 01/20/11
Dilution Factor: 1

Prep Date.....: 01/20/11
Prep Batch #....: 1021283

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acetone	ND	20	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	20	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A190466

Work Order #...: MDLG91AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	85	(68 - 110)
1,2-Dichloroethane-d4	85	(64 - 110)
Toluene-d8	93	(69 - 128)
4-Bromofluorobenzene	86	(64 - 130)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A190466
MB Lot-Sample #: A1A240000-167

Work Order #...: MDMGA1AA

Matrix.....: SOLID

Analysis Date...: 01/21/11
Dilution Factor: 1

Prep Date.....: 01/19/11
Prep Batch #...: 1024167

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	1000	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	250	ug/kg	SW846 8260B
2-Butanone	ND	1000	ug/kg	SW846 8260B
Carbon disulfide	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	500	ug/kg	SW846 8260B
Chloroethane	ND	250	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Chloromethane	ND	250	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	250	ug/kg	SW846 8260B
2-Hexanone	ND	1000	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	1000	ug/kg	SW846 8260B
Styrene	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	250	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: A1A190466

Work Order #....: MDMGA1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
Vinyl chloride	ND	250	ug/kg	SW846 8260B
Xylenes (total)	ND	500	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	1000	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	82	(30 - 122)
1,2-Dichloroethane-d4	88	(39 - 128)
Toluene-d8	87	(33 - 134)
4-Bromofluorobenzene	85	(26 - 141)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A190466
MB Lot-Sample #: A1A250000-236

Work Order #...: MDN2H1AA

Matrix.....: WATER

Analysis Date...: 01/24/11
Dilution Factor: 1

Prep Date.....: 01/24/11
Prep Batch #...: 1025236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: A1A190466

Work Order #....: MDN2H1AA

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(75 - 121)
1,2-Dichloroethane-d4	93	(63 - 129)
Toluene-d8	92	(74 - 115)
4-Bromofluorobenzene	88	(66 - 117)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A190466

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	ND	Work Order #: MDHK41AA		MB Lot-Sample #:	A1A200000-055	
		10.0	%	MCAWW 160.3 MOD	01/20-01/21/11	1020055
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: A1A190466 Work Order #....: MDLG91AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: A1A210000-283 MDLG91AD-LCSD
 Prep Date.....: 01/20/11 Analysis Date...: 01/20/11
 Prep Batch #....: 1021283
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	112	(81 - 116)			SW846 8260B
	102	(81 - 116)	10	(0-30)	SW846 8260B
Chlorobenzene	105	(83 - 114)			SW846 8260B
	101	(83 - 114)	4.6	(0-30)	SW846 8260B
1,1-Dichloroethene	110	(83 - 131)			SW846 8260B
	99	(83 - 131)	10	(0-30)	SW846 8260B
Toluene	115	(86 - 123)			SW846 8260B
	108	(86 - 123)	5.7	(0-30)	SW846 8260B
Trichloroethene	113	(82 - 123)			SW846 8260B
	106	(82 - 123)	6.6	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(68 - 110)
	87	(68 - 110)
1,2-Dichloroethane-d4	89	(64 - 110)
	83	(64 - 110)
Toluene-d8	99	(69 - 128)
	96	(69 - 128)
4-Bromofluorobenzene	103	(64 - 130)
	100	(64 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190466 Work Order #...: MDMGA1AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: A1A240000-167 MDMGA1AD-LCSD
 Prep Date.....: 01/19/11 Analysis Date...: 01/21/11
 Prep Batch #...: 1024167
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	97	(70 - 117)			SW846 8260B
	94	(70 - 117)	3.4	(0-20)	SW846 8260B
Chlorobenzene	98	(71 - 116)			SW846 8260B
	95	(71 - 116)	2.8	(0-30)	SW846 8260B
1,1-Dichloroethene	103	(44 - 143)			SW846 8260B
	84	(44 - 143)	21	(0-30)	SW846 8260B
Toluene	99	(66 - 123)			SW846 8260B
	94	(66 - 123)	5.9	(0-30)	SW846 8260B
Trichloroethene	98	(59 - 124)			SW846 8260B
	96	(59 - 124)	2.3	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	92	(30 - 122)
	81	(30 - 122)
1,2-Dichloroethane-d4	90	(39 - 128)
	84	(39 - 128)
Toluene-d8	90	(33 - 134)
	83	(33 - 134)
4-Bromofluorobenzene	84	(26 - 141)
	84	(26 - 141)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190466 Work Order #...: MDN2H1AC Matrix.....: WATER
 LCS Lot-Sample#: A1A250000-236
 Prep Date.....: 01/24/11 Analysis Date...: 01/24/11
 Prep Batch #...: 1025236
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	98	(83 - 112)	SW846 8260B
Chlorobenzene	96	(85 - 110)	SW846 8260B
1,1-Dichloroethene	106	(78 - 131)	SW846 8260B
Toluene	96	(84 - 111)	SW846 8260B
Trichloroethene	97	(76 - 117)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	92	(75 - 121)
1,2-Dichloroethane-d4	90	(63 - 129)
Toluene-d8	94	(74 - 115)
4-Bromofluorobenzene	101	(66 - 117)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A190466 Work Order #...: MDGHV1AC-MS Matrix.....: WATER
 MS Lot-Sample #: A1A190447-006 MDGHV1AD-MSD
 Date Sampled...: 01/18/11 10:30 Date Received...: 01/19/11
 Prep Date.....: 01/24/11 Analysis Date...: 01/24/11
 Prep Batch #...: 1025236
 Dilution Factor: 333.33

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	98	(72 - 121)			SW846 8260B
	90	(72 - 121)	2.5	(0-30)	SW846 8260B
Chlorobenzene	98	(80 - 110)			SW846 8260B
	100	(80 - 110)	1.4	(0-30)	SW846 8260B
1,1-Dichloroethene	110	(74 - 135)			SW846 8260B
	109	(74 - 135)	1.0	(0-30)	SW846 8260B
Toluene	102	(78 - 114)			SW846 8260B
	101	(78 - 114)	1.0	(0-30)	SW846 8260B
Trichloroethene	99	(66 - 120)			SW846 8260B
	101	(66 - 120)	1.8	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(75 - 121)
	94	(75 - 121)
1,2-Dichloroethane-d4	97	(63 - 129)
	92	(63 - 129)
Toluene-d8	98	(74 - 115)
	97	(74 - 115)
4-Bromofluorobenzene	101	(66 - 117)
	101	(66 - 117)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

General Chemistry

Matrix.....: SOLID

Date Received..: 01/19/11

% Moisture.....: 25

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: A1A190466 Work Order #....: MDGVR-SMP Matrix.....: SOLID

MDGVR-DUP

Date Sampled...: 01/18/11 10:10 Date Received...: 01/19/11

% Moisture.....: 40

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	60.2	59.8	%	0.63	(0-20)	SD Lot-Sample #: A1A190508-005 MCAWW 160.3 MOD	01/20-01/21/11	1020055

Dilution Factor: 1

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location:

North Canton

Regulatory program:

☐ DW ☐ NPDES ☐ RCRA ☒ Other

OK VAP

TestAmerica Laboratories, Inc.

COC No:

1 of 2 COCs

Lab Contact:

Nathan Petras

Telephone:

(330) 966-8296

Site Contact:

Doug Wetzell

Telephone:

Client Project Manager:

Doug Wetzell

Telephone:

Company Name:

HZW Environmental

Address:

6105 Hensley Road

City/State/Zip:

Mentor, Ohio 44060

Phone:

(440) 357-1260

Project Name:

Strongsville

Project Number:

H10013-11

P.O. #

Sample Identification

TestAmerica Laboratories, Inc.

COC No:

1 of 2 COCs

TestAmerica Laboratories, Inc.

COC No:

1 of 2 COCs

TestAmerica Laboratories, Inc.

COC No:

1 of 2 COCs

TestAmerica Laboratories, Inc.

COC No:

1 of 2 COCs

TestAmerica Laboratories, Inc.

COC No:

1 of 2 COCs

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location:

North Canton

Regulatory program:

☐ DW☐ NPDES☐ RCRA☒ Other

Dkt VMP

Client Contact:

Company Name:

H&W Environmental

Address:

6105 Hensley Road

City/State/Zip:

Mentor, Ohio 44060

Phone:

(440) 357-1260

Project Name:

Strongsville

Project Number:

H10013-11

P.O.#

Client Project Manager:

Doug Wetzel

Telephone:

Email:

dwetzel@hzwenv.com

Method of Shipment/Carrier:

Shipping/Tracking No:

Site Contact:

Telephone:

Lab Contact:

Nathan Pietras

Telephone:

(330) 966-8296

TestAmerica Laboratories, Inc.

COC No:

2 of 2 COCs

Analytes

VOCs-8260 preserved
by 5035

VOCs-8260

Sample Identification

Sample Date

Sample Time

Air

Aqueous

Sediment

Solid

Other:

H2SO4

HNO3

HCl

NaOH

ZnAc/NaOH

Unpres

Other:

5035

VOCs-8260 preserved
by 5035

VOCs-8260

Sample Specific Notes/
Special Instructions:Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Special Instructions/QC Requirements & Comments:

2 coolers

Sample Disposed (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For

Months

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

Date/Time:

Received by:

Company:

Date/Time:

Relinquished by:

Company:

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Lot Number: AA 190466

Client H2O Environment Project Strongsville By: [Signature]
Cooler Received on 1-19-11 Opened on 1-19-11 (Signature)
FedEx ☐ UPS ☒ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other ☐
TestAmerica Cooler # A405666 Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other ☐
1. Were custody seals on the outside of the cooler(s)? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
If YES, Quantity _____ Quantity Unsalvageable _____
Were custody seals on the outside of cooler(s) signed and dated? Yes ☐ No ☐ NA ☒
Were custody seals on the bottle(s)? Yes ☐ No ☒
If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt _____ °C See back of form for multiple coolers/temps ☒
METHOD: IR ☒ Other ☐ _____
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☐ No ☐ NA ☒
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐
Contacted PM NAP Date 1-19-10 by [Signature] via Verbal ☒ Voice Mail ☐ Other ☐
Concerning #14

14. CHAIN OF CUSTODY

The following discrepancies occurred:

logged TB-01 + TB-02 dated as 1/14/11 per NAP.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 100110-HNO₃; Sulfuric Acid Lot# 110410-H₂SO₄; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH₃COO)₂ZN/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials

[illegible]

END OF REPORT

Affidavit by Certified Lab Pursuant to OAC 3745-300-13(M)

TestAmerica Laboratories, Inc.

State of Ohio

ss:

County of Stark

I, Dorothy J. Leeson, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

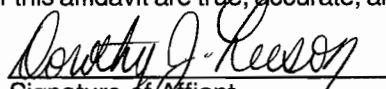
1. I am an adult over the age of eighteen (18) years old and competent to testify herein.
2. I am employed by TestAmerica Laboratories, Inc. as Quality Assurance Manager and authorized to submit this affidavit on behalf of TestAmerica North Canton.
3. The purpose of this submission is to support a request for a no further action letter or other aspects of a voluntary action, under Ohio's Voluntary Action Program (VAP) as set forth in Ohio Revised Code Chapter 3746 and Ohio Administrative Code (OAC) Chapter 3745-300.
4. TestAmerica North Canton performed analyses on behalf of **HZW Environmental Consultants** for a voluntary action at property known as **Strongsville, 14356-14440 Pearl Road, Strongsville, Ohio.**
5. This affidavit applies to and is submitted with the following information, data, documents or reports for the property:

Laboratory Report Number
A1A210537

Report Date
January 28, 2011

6. TestAmerica North Canton was a VAP certified laboratory pursuant to OAC 3745-300-04 when it performed analyses referenced herein.
7. The analyses under this affidavit consist of certified data, as described by OAC 3745-300-04(B) with the exception of the analytes, parameter groups, or methods listed below:
Not applicable.
8. TestAmerica North Canton performed the analyses within its current VAP certification. The laboratory was certified for each analyte, parameter group and method used at the time that it performed the analyses. The analyses were performed consistent with the laboratory's standard operating procedures and quality assurance program plan as approved under OAC 3745-300-04.
9. The information, data, documents, and reports identified under this affidavit are true, accurate, and complete.

Further affiant sayeth naught.


Signature of Affiant

Sworn to before me this 1st day of February, 2011.



JEFFREY C. SMITH
Notary Public, State of Ohio
My Commission Expires Feb. 12, 2012


Jeffrey C. Smith
Notary Public

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. H10013-11

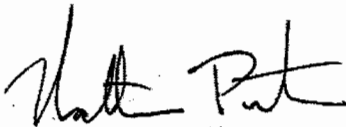
STRONGSVILLE

Lot #: A1A210537

Doug Wetzel

HZW Environmental Consultants
6105 Heisley Rd
Mentor, OH 44060

TESTAMERICA LABORATORIES, INC.



Nathan Pietras
Project Manager

nathan.pietras@testamericainc.com

Approved for release.
Nathan Pietras
Project Manager
1/31/2011 9:50 AM

January 28, 2011



CASE NARRATIVE

A1A210537

The following report contains the analytical results for three solid samples and one quality control sample submitted to TestAmerica North Canton by HZW Environmental Consultants from the STRONGSVILLE Site, project number H10013-11. The samples were received January 21, 2011, according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Doug Wetzel on January 27, 2011. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

All parameters were evaluated to the reporting limit.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Nathan Pietras, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 3.2°C.

GC/MS VOLATILES

There were no client requested Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples in batch 1026114 and 1026311. Therefore, the laboratory has included a Laboratory Control Sample Duplicate (LCSD) in the QC batch. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the reparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

<u>Volatile (GC or GC/MS)</u>	<u>Semivolatile (GC/MS)</u>	<u>Metals ICP-MS</u>	<u>Metals ICP Trace</u>
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS NARRATIVE (continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.
- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the reparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.



TestAmerica Certifications and Approvals:

The laboratory is certified for the analytes listed on the documents below. These are available upon request.
California (#01144CA), Connecticut (#PH-0590), Florida (#E87225),
Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Nevada
(#OH-000482008A), OhioVAP (#CL0024), Pennsylvania (#008), West Virginia (#210), Wisconsin (#999518190), NAVY,
ARMY, USDA Soil Permit

N:\QAQC\Customer Service\Narrative - Combined RCRA _CWA 032609.doc

EXECUTIVE SUMMARY - Detection Highlights

A1A210537

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
HB-01(2-4')-012011 01/20/11 12:15 001				
Percent Solids	78.7	10.0	%	MCAWW 160.3 MOD
HB-04(4-6')-012011 01/20/11 13:40 002				
Toluene	440	260	ug/kg	SW846 8260B
Percent Solids	76.4	10.0	%	MCAWW 160.3 MOD
HB-05(0-2')-012011 01/20/11 13:00 003				
Percent Solids	78.6	10.0	%	MCAWW 160.3 MOD
TB-03-012011 01/20/11 004				
Acetone	10	10	ug/L	SW846 8260B

ANALYTICAL METHODS SUMMARY

A1A210537

PARAMETER	ANALYTICAL METHOD
Total Residue as Percent Solids	MCAWW 160.3 MOD
Volatile Organics by GC/MS	SW846 8260B

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A1A210537

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MDK0P	001	HB-01 (2-4')-012011	01/20/11	12:15
MDK00	002	HB-04 (4-6')-012011	01/20/11	13:40
MDK03	003	HB-05 (0-2')-012011	01/20/11	13:00
MDK04	004	TB-03-012011	01/20/11	

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HZW Environmental Consultants

Client Sample ID: HB-01(2-4')-012011

GC/MS Volatiles

Lot-Sample #....: A1A210537-001 **Work Order #....:** MDK0P1AC **Matrix.....:** SO
Date Sampled....: 01/20/11 12:15 **Date Received...:** 01/21/11
Prep Date.....: 01/25/11 **Analysis Date...:** 01/25/11
Prep Batch #....: 1026311
Dilution Factor: 0.84
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	21	ug/kg
Benzene	ND	5.3	ug/kg
Bromodichloromethane	ND	5.3	ug/kg
Bromoform	ND	5.3	ug/kg
Bromomethane	ND	5.3	ug/kg
2-Butanone	ND	21	ug/kg
Carbon disulfide	ND	5.3	ug/kg
Carbon tetrachloride	ND	5.3	ug/kg
Chlorobenzene	ND	5.3	ug/kg
Chloroethane	ND	5.3	ug/kg
Chloroform	ND	5.3	ug/kg
Chloromethane	ND	5.3	ug/kg
Dibromochloromethane	ND	5.3	ug/kg
1,2-Dibromo-3-chloro- propane	ND	11	ug/kg
1,2-Dibromoethane	ND	5.3	ug/kg
1,2-Dichlorobenzene	ND	5.3	ug/kg
1,3-Dichlorobenzene	ND	5.3	ug/kg
1,4-Dichlorobenzene	ND	5.3	ug/kg
Dichlorodifluoromethane	ND	5.3	ug/kg
1,1-Dichloroethane	ND	5.3	ug/kg
1,2-Dichloroethane	ND	5.3	ug/kg
1,1-Dichloroethene	ND	5.3	ug/kg
cis-1,2-Dichloroethene	ND	5.3	ug/kg
trans-1,2-Dichloroethene	ND	5.3	ug/kg
1,2-Dichloropropane	ND	5.3	ug/kg
cis-1,3-Dichloropropene	ND	5.3	ug/kg
trans-1,3-Dichloropropene	ND	5.3	ug/kg
Ethylbenzene	ND	5.3	ug/kg
2-Hexanone	ND	21	ug/kg
Isopropylbenzene	ND	5.3	ug/kg
Methylene chloride	ND	5.3	ug/kg
4-Methyl-2-pentanone	ND	21	ug/kg
Methyl tert-butyl ether	ND	21	ug/kg
Styrene	ND	5.3	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.3	ug/kg
Tetrachloroethene	ND	5.3	ug/kg
Toluene	ND	5.3	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-01(2-4')-012011

GC/MS Volatiles

Lot-Sample #....: A1A210537-001 Work Order #....: MDK0P1AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	5.3	ug/kg
1,1,1-Trichloroethane	ND	5.3	ug/kg
1,1,2-Trichloroethane	ND	5.3	ug/kg
Trichloroethene	ND	5.3	ug/kg
Trichlorofluoromethane	ND	5.3	ug/kg
Vinyl chloride	ND	5.3	ug/kg
Xylenes (total)	ND	11	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	96	(68 - 110)
1,2-Dichloroethane-d4	91	(64 - 110)
Toluene-d8	93	(69 - 128)
4-Bromofluorobenzene	90	(64 - 130)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-01(2-4')-012011

General Chemistry

Lot-Sample #....: A1A210537-001 Work Order #....: MDK0P Matrix.....: SO
Date Sampled....: 01/20/11 12:15 Date Received...: 01/21/11
% Moisture.....: 21

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	78.7	10.0	%	MCAWW 160.3 MOD	01/24-01/25/11	1024184
Dilution Factor: 1						

HZW Environmental Consultants

Client Sample ID: HB-04(4-6')-012011

GC/MS Volatiles

Lot-Sample #....: A1A210537-002 **Work Order #....:** MDK001AC **Matrix.....:** SO
Date Sampled....: 01/20/11 13:40 **Date Received...:** 01/21/11
Prep Date.....: 01/21/11 **Analysis Date...:** 01/25/11
Prep Batch #....: 1026114
Dilution Factor: 0.8
% Moisture.....: 24 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	1000	ug/kg
Benzene	ND	260	ug/kg
Bromodichloromethane	ND	260	ug/kg
Bromoform	ND	260	ug/kg
Bromomethane	ND	260	ug/kg
2-Butanone	ND	1000	ug/kg
Carbon disulfide	ND	260	ug/kg
Carbon tetrachloride	ND	260	ug/kg
Chlorobenzene	ND	260	ug/kg
Dibromochloromethane	ND	260	ug/kg
1,2-Dibromo-3-chloro- propane	ND	520	ug/kg
Chloroethane	ND	260	ug/kg
Chloroform	ND	260	ug/kg
Chloromethane	ND	260	ug/kg
1,2-Dibromoethane	ND	260	ug/kg
1,2-Dichlorobenzene	ND	260	ug/kg
1,3-Dichlorobenzene	ND	260	ug/kg
1,4-Dichlorobenzene	ND	260	ug/kg
Dichlorodifluoromethane	ND	260	ug/kg
1,1-Dichloroethane	ND	260	ug/kg
1,2-Dichloroethane	ND	260	ug/kg
1,1-Dichloroethene	ND	260	ug/kg
cis-1,2-Dichloroethene	ND	260	ug/kg
trans-1,2-Dichloroethene	ND	260	ug/kg
1,2-Dichloropropane	ND	260	ug/kg
cis-1,3-Dichloropropene	ND	260	ug/kg
trans-1,3-Dichloropropene	ND	260	ug/kg
Ethylbenzene	ND	260	ug/kg
Trichlorofluoromethane	ND	260	ug/kg
2-Hexanone	ND	1000	ug/kg
Isopropylbenzene	ND	260	ug/kg
Methylene chloride	ND	260	ug/kg
4-Methyl-2-pentanone	ND	1000	ug/kg
Styrene	ND	260	ug/kg
1,1,2,2-Tetrachloroethane	ND	260	ug/kg
Tetrachloroethene	ND	260	ug/kg
Toluene	440	260	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-04(4-6')-012011

GC/MS Volatiles

Lot-Sample #...: A1A210537-002 Work Order #...: MDK001AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	260	ug/kg
1,1,1-Trichloroethane	ND	260	ug/kg
1,1,2-Trichloroethane	ND	260	ug/kg
Trichloroethene	ND	260	ug/kg
Vinyl chloride	ND	260	ug/kg
Xylenes (total)	ND	520	ug/kg
Methyl tert-butyl ether	ND	1000	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	63	(30 - 122)
1,2-Dichloroethane-d4	66	(39 - 128)
Toluene-d8	64	(33 - 134)
4-Bromofluorobenzene	63	(26 - 141)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-04(4-6')-012011

General Chemistry

Lot-Sample #...: A1A210537-002 Work Order #...: MDK00 Matrix.....: SO
Date Sampled...: 01/20/11 13:40 Date Received...: 01/21/11
% Moisture.....: 24

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	76.4	10.0	%	MCAWW 160.3 MOD	01/24-01/25/11	1024184

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: HB-05(0-2')-012011

GC/MS Volatiles

Lot-Sample #....: A1A210537-003 **Work Order #....:** MDK031AC **Matrix.....:** SO
Date Sampled....: 01/20/11 13:00 **Date Received...:** 01/21/11
Prep Date.....: 01/25/11 **Analysis Date...:** 01/25/11
Prep Batch #....: 1026311
Dilution Factor: 0.81
% Moisture.....: 21 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Acetone	ND	21	ug/kg
Benzene	ND	5.2	ug/kg
Bromodichloromethane	ND	5.2	ug/kg
Bromoform	ND	5.2	ug/kg
Bromomethane	ND	5.2	ug/kg
2-Butanone	ND	21	ug/kg
Carbon disulfide	ND	5.2	ug/kg
Carbon tetrachloride	ND	5.2	ug/kg
Chlorobenzene	ND	5.2	ug/kg
Chloroethane	ND	5.2	ug/kg
Chloroform	ND	5.2	ug/kg
Chloromethane	ND	5.2	ug/kg
Dibromochloromethane	ND	5.2	ug/kg
1,2-Dibromo-3-chloro- propane	ND	10	ug/kg
1,2-Dibromoethane	ND	5.2	ug/kg
1,2-Dichlorobenzene	ND	5.2	ug/kg
1,3-Dichlorobenzene	ND	5.2	ug/kg
1,4-Dichlorobenzene	ND	5.2	ug/kg
Dichlorodifluoromethane	ND	5.2	ug/kg
1,1-Dichloroethane	ND	5.2	ug/kg
1,2-Dichloroethane	ND	5.2	ug/kg
1,1-Dichloroethene	ND	5.2	ug/kg
cis-1,2-Dichloroethene	ND	5.2	ug/kg
trans-1,2-Dichloroethene	ND	5.2	ug/kg
1,2-Dichloropropane	ND	5.2	ug/kg
cis-1,3-Dichloropropene	ND	5.2	ug/kg
trans-1,3-Dichloropropene	ND	5.2	ug/kg
Ethylbenzene	ND	5.2	ug/kg
2-Hexanone	ND	21	ug/kg
Isopropylbenzene	ND	5.2	ug/kg
Methylene chloride	ND	5.2	ug/kg
4-Methyl-2-pentanone	ND	21	ug/kg
Methyl tert-butyl ether	ND	21	ug/kg
Styrene	ND	5.2	ug/kg
1,1,2,2-Tetrachloroethane	ND	5.2	ug/kg
Tetrachloroethene	ND	5.2	ug/kg
Toluene	ND	5.2	ug/kg

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: HB-05(0-2')-012011

GC/MS Volatiles

Lot-Sample #...: A1A210537-003 Work Order #...: MDK031AC Matrix.....: SO

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	5.2	ug/kg
1,1,1-Trichloroethane	ND	5.2	ug/kg
1,1,2-Trichloroethane	ND	5.2	ug/kg
Trichloroethene	ND	5.2	ug/kg
Trichlorofluoromethane	ND	5.2	ug/kg
Vinyl chloride	ND	5.2	ug/kg
Xylenes (total)	ND	10	ug/kg

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	88	(68 - 110)
1,2-Dichloroethane-d4	85	(64 - 110)
Toluene-d8	100	(69 - 128)
4-Bromofluorobenzene	83	(64 - 130)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

HZW Environmental Consultants

Client Sample ID: HB-05(0-2')-012011

General Chemistry

Lot-Sample #....: A1A210537-003 Work Order #....: MDK03 Matrix.....: SO
Date Sampled....: 01/20/11 13:00 Date Received...: 01/21/11
% Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	78.6	10.0	%	MCAWW 160.3 MOD	01/24-01/25/11	1024184

Dilution Factor: 1

HZW Environmental Consultants

Client Sample ID: TB-03-012011

GC/MS Volatiles

Lot-Sample #....: A1A210537-004 **Work Order #....:** MDK041AA **Matrix.....:** WQ
Date Sampled....: 01/20/11 **Date Received...:** 01/21/11
Prep Date.....: 01/25/11 **Analysis Date...:** 01/25/11
Prep Batch #....: 1026203
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	10	10	ug/L
Benzene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
2-Butanone	ND	10	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
cis-1,3-Dichloropropene	ND	1.0	ug/L
trans-1,3-Dichloropropene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
2-Hexanone	ND	10	ug/L
Isopropylbenzene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Styrene	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro- benzene	ND	1.0	ug/L

(Continued on next page)

HZW Environmental Consultants

Client Sample ID: TB-03-012011

GC/MS Volatiles

Lot-Sample #....: A1A210537-004 Work Order #....: MDK041AA Matrix.....: WQ

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	84	(75 - 121)
1,2-Dichloroethane-d4	77	(63 - 129)
Toluene-d8	84	(74 - 115)
4-Bromofluorobenzene	87	(66 - 117)

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: A1A210537
MB Lot-Sample #: A1A260000-114

Work Order #....: MDPTM1AA

Matrix.....: SOLID

Analysis Date...: 01/25/11

Prep Date.....: 01/21/11

Prep Batch #....: 1026114

Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	1000	ug/kg	SW846 8260B
Benzene	ND	250	ug/kg	SW846 8260B
Bromodichloromethane	ND	250	ug/kg	SW846 8260B
Bromoform	ND	250	ug/kg	SW846 8260B
Bromomethane	ND	250	ug/kg	SW846 8260B
2-Butanone	ND	1000	ug/kg	SW846 8260B
Carbon disulfide	ND	250	ug/kg	SW846 8260B
Carbon tetrachloride	ND	250	ug/kg	SW846 8260B
Chlorobenzene	ND	250	ug/kg	SW846 8260B
Dibromochloromethane	ND	250	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	500	ug/kg	SW846 8260B
Chloroethane	ND	250	ug/kg	SW846 8260B
Chloroform	ND	250	ug/kg	SW846 8260B
Chloromethane	ND	250	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	250	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	250	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	250	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	250	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	250	ug/kg	SW846 8260B
2-Hexanone	ND	1000	ug/kg	SW846 8260B
Isopropylbenzene	ND	250	ug/kg	SW846 8260B
Methylene chloride	ND	250	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	1000	ug/kg	SW846 8260B
Styrene	ND	250	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Toluene	ND	250	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	250	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	250	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A210537

Work Order #...: MDPTM1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,1,2-Trichloroethane	ND	250	ug/kg	SW846 8260B
Trichloroethene	ND	250	ug/kg	SW846 8260B
Vinyl chloride	ND	250	ug/kg	SW846 8260B
Xylenes (total)	ND	500	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	1000	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	82	(30 - 122)
1,2-Dichloroethane-d4	82	(39 - 128)
Toluene-d8	82	(33 - 134)
4-Bromofluorobenzene	78	(26 - 141)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: A1A210537
MB Lot-Sample #: A1A260000-203

Work Order #....: MDP6N1AA

Matrix.....: WATER

Analysis Date...: 01/25/11

Prep Date.....: 01/25/11

Prep Batch #....: 1026203

Dilution Factor: 1

PARAMETER	RESULT	REPORTING			METHOD
		LIMIT	UNITS		
Acetone	ND	10	ug/L		SW846 8260B
Benzene	ND	1.0	ug/L		SW846 8260B
Bromodichloromethane	ND	1.0	ug/L		SW846 8260B
Bromoform	ND	1.0	ug/L		SW846 8260B
Bromomethane	ND	1.0	ug/L		SW846 8260B
2-Butanone	ND	10	ug/L		SW846 8260B
Carbon disulfide	ND	1.0	ug/L		SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L		SW846 8260B
Chlorobenzene	ND	1.0	ug/L		SW846 8260B
Chloroethane	ND	1.0	ug/L		SW846 8260B
Chloroform	ND	1.0	ug/L		SW846 8260B
Chloromethane	ND	1.0	ug/L		SW846 8260B
Dibromochloromethane	ND	1.0	ug/L		SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	2.0	ug/L		SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L		SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L		SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L		SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L		SW846 8260B
Dichlorodifluoromethane	ND	1.0	ug/L		SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L		SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L		SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L		SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L		SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L		SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L		SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L		SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L		SW846 8260B
Ethylbenzene	ND	1.0	ug/L		SW846 8260B
2-Hexanone	ND	10	ug/L		SW846 8260B
Isopropylbenzene	ND	1.0	ug/L		SW846 8260B
Methylene chloride	ND	1.0	ug/L		SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L		SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/L		SW846 8260B
Styrene	ND	1.0	ug/L		SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L		SW846 8260B
Tetrachloroethene	ND	1.0	ug/L		SW846 8260B
Toluene	ND	1.0	ug/L		SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L		SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L		SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A210537

Work Order #...: MDP6N1AA

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	86	(75 - 121)
1,2-Dichloroethane-d4	80	(63 - 129)
Toluene-d8	83	(74 - 115)
4-Bromofluorobenzene	83	(66 - 117)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: A1A210537
MB Lot-Sample #: A1A260000-311

Work Order #...: MDQ0Q1AA

Matrix.....: SOLID

Analysis Date...: 01/25/11
Dilution Factor: 1

Prep Date.....: 01/25/11
Prep Batch #...: 1026311

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	20	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	5.0	ug/kg	SW846 8260B
2-Butanone	ND	20	ug/kg	SW846 8260B
Carbon disulfide	ND	5.0	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	5.0	ug/kg	SW846 8260B
Chloroform	ND	5.0	ug/kg	SW846 8260B
Chloromethane	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloro- propane	ND	10	ug/kg	SW846 8260B
1,2-Dibromoethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	20	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trichloro- benzene	ND	5.0	ug/kg	SW846 8260B
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #....: A1A210537

Work Order #....: MDQ0Q1AA

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B
Trichlorofluoromethane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	10	ug/kg	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(68 - 110)
1,2-Dichloroethane-d4	89	(64 - 110)
Toluene-d8	98	(69 - 128)
4-Bromofluorobenzene	93	(64 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A1A210537

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	ND	Work Order #: MDMH81AA	%	MB Lot-Sample #: A1A240000-184	01/24-01/25/11	1024184
		10.0		MCAWW 160.3 MOD		
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210537 Work Order #...: MDPTM1AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: A1A260000-114 MDPTM1AD-LCSD
 Prep Date.....: 01/21/11 Analysis Date...: 01/25/11
 Prep Batch #...: 1026114
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	92	(70 - 117)			SW846 8260B
	94	(70 - 117)	1.4	(0-20)	SW846 8260B
Chlorobenzene	96	(71 - 116)			SW846 8260B
	95	(71 - 116)	1.4	(0-30)	SW846 8260B
1,1-Dichloroethene	99	(44 - 143)			SW846 8260B
	94	(44 - 143)	5.1	(0-30)	SW846 8260B
Toluene	97	(66 - 123)			SW846 8260B
	97	(66 - 123)	0.38	(0-30)	SW846 8260B
Trichloroethene	97	(59 - 124)			SW846 8260B
	94	(59 - 124)	3.0	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(30 - 122)
	88	(30 - 122)
1,2-Dichloroethane-d4	87	(39 - 128)
	88	(39 - 128)
Toluene-d8	88	(33 - 134)
	87	(33 - 134)
4-Bromofluorobenzene	86	(26 - 141)
	84	(26 - 141)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210537 Work Order #...: MDP6N1AC Matrix.....: WATER
 LCS Lot-Sample#: A1A260000-203
 Prep Date.....: 01/25/11 Analysis Date...: 01/25/11
 Prep Batch #...: 1026203
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	99	(83 - 112)	SW846 8260B
Chlorobenzene	97	(85 - 110)	SW846 8260B
1,1-Dichloroethene	92	(78 - 131)	SW846 8260B
Toluene	93	(84 - 111)	SW846 8260B
Trichloroethene	103	(76 - 117)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Dibromofluoromethane	86	(75 - 121)
1,2-Dichloroethane-d4	84	(63 - 129)
Toluene-d8	84	(74 - 115)
4-Bromofluorobenzene	88	(66 - 117)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210537 Work Order #...: MDQ0Q1AC-LCS Matrix.....: SOLID
 LCS Lot-Sample#: A1A260000-311 MDQ0Q1AD-LCSD
 Prep Date.....: 01/25/11 Analysis Date...: 01/25/11
 Prep Batch #...: 1026311
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	109	(81 - 116)			SW846 8260B
	106	(81 - 116)	2.2	(0-30)	SW846 8260B
Chlorobenzene	104	(83 - 114)			SW846 8260B
	102	(83 - 114)	2.5	(0-30)	SW846 8260B
1,1-Dichloroethene	105	(83 - 131)			SW846 8260B
	108	(83 - 131)	2.9	(0-30)	SW846 8260B
Toluene	112	(86 - 123)			SW846 8260B
	106	(86 - 123)	5.3	(0-30)	SW846 8260B
Trichloroethene	109	(82 - 123)			SW846 8260B
	106	(82 - 123)	2.6	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(68 - 110)
	94	(68 - 110)
1,2-Dichloroethane-d4	91	(64 - 110)
	90	(64 - 110)
Toluene-d8	101	(69 - 128)
	100	(69 - 128)
4-Bromofluorobenzene	103	(64 - 130)
	107	(64 - 130)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: A1A210537 Work Order #...: MDG671AE-MS Matrix.....: WATER
 MS Lot-Sample #: C1A190533-006 MDG671AF-MSD
 Date Sampled...: 01/18/11 12:33 Date Received...: 01/19/11
 Prep Date.....: 01/25/11 Analysis Date...: 01/25/11
 Prep Batch #...: 1026203
 Dilution Factor: 3.33

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	98	(72 - 121)			SW846 8260B
	99	(72 - 121)	1.0	(0-30)	SW846 8260B
Chlorobenzene	94	(80 - 110)			SW846 8260B
	94	(80 - 110)	0.31	(0-30)	SW846 8260B
1,1-Dichloroethene	92	(74 - 135)			SW846 8260B
	92	(74 - 135)	0.23	(0-30)	SW846 8260B
Toluene	92	(78 - 114)			SW846 8260B
	92	(78 - 114)	0.80	(0-30)	SW846 8260B
Trichloroethene	106	(66 - 120)			SW846 8260B
	99	(66 - 120)	2.4	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	88	(75 - 121)
	89	(75 - 121)
1,2-Dichloroethane-d4	82	(63 - 129)
	80	(63 - 129)
Toluene-d8	83	(74 - 115)
	83	(74 - 115)
4-Bromofluorobenzene	90	(66 - 117)
	90	(66 - 117)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: A1A210537 Work Order #....: MDKD3-SMP Matrix.....: SOLID

MDKD3-DUP

Date Sampled....: 01/17/11 11:15 Date Received...: 01/21/11

% Moisture.....: 24

PARAM RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids					SD Lot-Sample #: A1A210471-001		
76.0	75.1	%	1.2	(0-20)	MCAWW 160.3 MOD	01/24-01/25/11	1024184
Dilution Factor: 1							

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: A1A210537

Work Order #....: MDKOP-SMP
MDKOP-DUP

Matrix.....: SO

Date Sampled....: 01/20/11 12:15 Date Received...: 01/21/11

% Moisture.....: 21

PARAM RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids					SD Lot-Sample #: A1A210537-001		
78.7	78.0	%	0.92	(0-20)	MCAWW 160.3 MOD	01/24-01/25/11	1024184
Dilution Factor: 1							

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory Location:

North Canton

Regulatory program:

☐ DW☐ NPDES☐ RCRA☒ Other

OH VAP

TestAmerica Laboratories, Inc.

Client Contact

Company Name:

H2W Environmental

Address:

6105 Hensley Rd.

City/State/Zip:

Mentor, Ohio 44060

Phone:

800-804-8484

Project Name:

Strongsville

Project Number:

H10013-11

P.O.#

Client Project Manager:

Doug Wetzel

Telephone:

dwetzel@h2wenv.com

Email:

dwetzel@h2wenv.com

Method of Shipment/Carrier:

Shipping/Tracking No:

Site Contact:

Telephone:

Lab Contact:

Nathan Petras

Telephone:

(330) 966-8296

COC No:

1 of 1 COCs

Analyses

VOCs-8260 preserved
by 5035

VOCs-8260

Sample Specific Notes /
Special Instructions:

Sample Identification

Sample Date

Sample Time

Air

Aqueous

Sediment

Solid

Other:

H2SO4

HNO3

HCl

NaOH

ZnAc/
NaOH

Unpres

Other: 5035 K

HB-01 (3-4)-012011

1-20-11

12:15

☒☒☒☒☒☒☒☒☒☒☒☒

HB-04 (4-6)-012011

1-20-11

13:40

☒☒☒☒☒☒☒☒☒☒☒☒

HB-05 (0-2)-012011

1-20-11

13:00

☒☒☒☒☒☒☒☒☒☒☒☒

TB-03-012011

1-20-11

☒☒☒☒☒☒☒☒☒☒☒☒

Possible Hazard Identification

☐ Non-Hazard☐ Flammable☐ Skin Irritant☐ Poison B☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client☐ Disposal By Lab☐ Archive For

Months

Special Instructions/QC Requirements & Comments:

Relinquished by:

Doug A. Petras

Company:

H2W Environmental

Date/Time:

1/21/11 08:50

Received by:

Nathan Petras

Company:

TA NL

Date/Time:

1/21/11 08:50

Relinquished by:

Doug A. Petras

Company:

H2W Environmental

Date/Time:

1/21/11 08:50

Received by:

Nathan Petras

Company:

TA NL

Date/Time:

1/21/11 08:50

Lot Number: A1A210537

Client HZW Project Stangeville By: [Signature]
Cooler Received on 1/21/11 Opened on 1/21/11 (Signature)

FedEx ☐ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☒ TestAmerica Courier ☐ Other _____

TestAmerica Cooler # _____ Multiple Coolers ☐ Foam Box ☐ Client Cooler ☒ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒

If YES, Quantity _____ Quantity Uns salvageable _____

Were custody seals on the outside of cooler(s) signed and dated? Yes ☐ No ☐ NA ☒

Were custody seals on the bottle(s)? Yes ☐ No ☒

If YES, are there any exceptions?

2. Shippers' packing slip attached to the cooler(s)? Yes ☐ No ☒

3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐

4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐

5. Packing material used: Bubble Wrap ☐ Foam ☒ None ☐ Other _____

6. Cooler temperature upon receipt 3, 2 °C See back of form for multiple coolers/temps ☐

METHOD: IR ☒ Other ☐

COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐

8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐

9. Were sample(s) at the correct pH upon receipt? Yes ☐ No ☐ NA ☒

10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐

11. Were air bubbles ≥ 6 mm in any VOA vials? Yes ☐ No ☐ NA ☒

12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐ NA ☐

13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the GC? Yes ☒ No ☐

13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐
Contacted PM _____ Date _____ by _____ via Verbal ☐ Voice Mail ☐ Other ☐

Contacted FM _____ Date _____ by _____ via verbal ☐ voice mail ☐ other ☐
Concerning _____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 100110-HNO₃; Sulfuric Acid Lot# 110410-H₂SO₄; Sodium Hydroxide Lot# 100108 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH₃COO)₂ZN/NaOH. What time was preservative added to sample(s)?

[illegible]

North Canton Facility

[illegible]

Discrepancies Cont'd.

[illegible]

END OF REPORT

APPENDIX C

GROUNDWATER LABORATORY ANALYTICAL REPORT

For VAP certified laboratories to attest to certified data under OAC 3745-300-13(N) and OAC 3745-300-04(A). (Note that Ohio EPA is to receive a legible copy of the CL's affidavit. The entity that was provided the CL's submission under affidavit may retain the CL's affidavit original.)

I, Thomas Morsefield being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

- Date of Document
01/28/2011

- 9263 Ravenna Rd. • Suite A-7 • Twinsburg, Ohio 44087 • Phone 330 963 6990 • Fax 330 963 6975



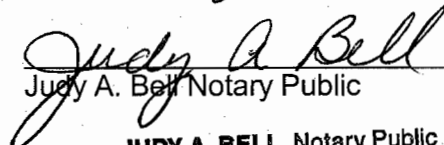
Certified Lab Affidavit Pursuant to OAC 3745-300-13(N)
Page 2

Further affiant sayeth naught.



Signature of Affiant

Sworn to before me and subscribed in my presence this 28 day of January, 2010.



Judy A. Bell Notary Public
JUDY A. BELL, Notary Public
In and for the State of Ohio
My Commission Expires Apr. 25, 2012

Revised 5/09, 8/09; consistent with OAC 3745-300-04 (10/14/06, and rev. eff. 3/1/09)



Monday, January 24, 2011

Matt Knecht
HZW Environmental Consultants
6105 Heisley Road
Mentor, OH 44060

TEL: 440-357-1260

FAX 440-357-1510

RE: Strongsville - H10013-11

Order No.: 1101019

Dear Matt Knecht:

GEO Analytical, Inc. received 4 sample(s) on 1/19/2011 for the analyses presented in the following report.

Analyses and all data for associated QC met laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Reviewed by



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants
Project: Strongsville - H10013-11
Lab Order: 1101019

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
1101019-001A	MW-B		1/14/2011 12:30:00 PM	1/19/2011
1101019-002A	MW-C		1/14/2011 1:55:00 PM	1/19/2011
1101019-003A	MW-D		1/14/2011 12:25:00 PM	1/19/2011
1101019-004A	MW-E		1/14/2011 12:20:00 PM	1/19/2011



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Project: Strongsville - H10013-11

Lab Order: 1101019

CASE NARRATIVE

None noted



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Client Sample ID: MW-B

Lab Order: 1101019

Tag Number:

Project: Strongsville - H10013-11

Collection Date: 1/14/2011 12:30:00 PM

Lab ID: 1101019-001A

Date Received: 1/19/2011

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
1,1,1,2-Tetrachloroethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,1,1-Trichloroethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,1,2,2-Tetrachloroethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,1,2-Trichloroethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,1-Dichloroethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,1-Dichloroethene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,1-Dichloropropene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2,3-Trichlorobenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2,3-Trichloropropane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2,4-Trichlorobenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2,4-Trimethylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2-Dibromo-3-chloropropane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2-Dibromoethane	ND	2.00		µg/L	1/20/2011 11:39:00 AM
1,2-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2-Dichloroethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,2-Dichloropropane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,3,5-Trimethylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,3-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,3-Dichloropropane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
1,4-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
2,2-Dichloropropane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
2-Butanone	ND	100		µg/L	1/20/2011 11:39:00 AM
2-Chlorotoluene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
2-Hexanone	ND	100		µg/L	1/20/2011 11:39:00 AM
4-Chlorotoluene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
4-Isopropyltoluene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
4-Methyl-2-pentanone	ND	100		µg/L	1/20/2011 11:39:00 AM
Acetone	ND	100		µg/L	1/20/2011 11:39:00 AM
Benzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Bromobenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Bromochloromethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Bromodichloromethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Bromoform	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Bromomethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Carbon disulfide	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Carbon tetrachloride	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Chlorobenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Chloroethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Chloroform	ND	5.00		µg/L	1/20/2011 11:39:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit



Analytical, Inc.

Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Client Sample ID: MW-B

Lab Order: 1101019

Tag Number:

Project: Strongsville - H10013-11

Collection Date: 1/14/2011 12:30:00 PM

Lab ID: 1101019-001A

Date Received: 1/19/2011

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
Chloromethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
cis-1,2-Dichloroethene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
cis-1,3-Dichloropropene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Dibromochloromethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Dibromomethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Dichlorodifluoromethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Ethylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Hexachlorobutadiene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Isopropylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
m,p-Xylene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Methyl tert-butyl ether	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Methylene chloride	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Naphthalene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
n-Butylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
n-Propylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
o-Xylene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
sec-Butylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Styrene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
tert-Butylbenzene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Tetrachloroethene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Toluene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
trans-1,2-Dichloroethene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
trans-1,3-Dichloropropene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Trichloroethene	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Trichlorofluoromethane	ND	5.00		µg/L	1/20/2011 11:39:00 AM
Vinyl acetate	ND	100		µg/L	1/20/2011 11:39:00 AM
Vinyl chloride	ND	2.00		µg/L	1/20/2011 11:39:00 AM
Surr: 1,2-Dichloroethane d4	96.7	78.2-129		%REC	1/20/2011 11:39:00 AM
Surr: Bromofluorobenzene	99.3	83-120		%REC	1/20/2011 11:39:00 AM
Surr: Toluene-d8	101	90.3-117		%REC	1/20/2011 11:39:00 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Client Sample ID: MW-C

Lab Order: 1101019

Tag Number:

Project: Strongsville - H10013-11

Collection Date: 1/14/2011 1:55:00 PM

Lab ID: 1101019-002A

Date Received: 1/19/2011

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
1,1,1,2-Tetrachloroethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,1,1-Trichloroethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,1,2,2-Tetrachloroethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,1,2-Trichloroethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,1-Dichloroethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,1-Dichloroethene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,1-Dichloropropene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2,3-Trichlorobenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2,3-Trichloropropane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2,4-Trichlorobenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2,4-Trimethylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2-Dibromo-3-chloropropane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2-Dibromoethane	ND	2.00		µg/L	1/20/2011 1:51:00 PM
1,2-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2-Dichloroethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,2-Dichloropropane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,3,5-Trimethylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,3-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,3-Dichloropropane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
1,4-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
2,2-Dichloropropane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
2-Butanone	ND	100		µg/L	1/20/2011 1:51:00 PM
2-Chlorotoluene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
2-Hexanone	ND	100		µg/L	1/20/2011 1:51:00 PM
4-Chlorotoluene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
4-Isopropyltoluene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
4-Methyl-2-pentanone	ND	100		µg/L	1/20/2011 1:51:00 PM
Acetone	ND	100		µg/L	1/20/2011 1:51:00 PM
Benzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Bromobenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Bromochloromethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Bromodichloromethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Bromoform	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Bromomethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Carbon disulfide	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Carbon tetrachloride	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Chlorobenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Chloroethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Chloroform	ND	5.00		µg/L	1/20/2011 1:51:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Client Sample ID: MW-C

Lab Order: 1101019

Tag Number:

Project: Strongsville - H10013-11

Collection Date: 1/14/2011 1:55:00 PM

Lab ID: 1101019-002A

Date Received: 1/19/2011

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
Chloromethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
cis-1,2-Dichloroethene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
cis-1,3-Dichloropropene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Dibromochloromethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Dibromomethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Dichlorodifluoromethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Ethylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Hexachlorobutadiene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Isopropylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
m,p-Xylene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Methyl tert-butyl ether	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Methylene chloride	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Naphthalene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
n-Butylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
n-Propylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
o-Xylene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
sec-Butylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Styrene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
tert-Butylbenzene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Tetrachloroethene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Toluene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
trans-1,2-Dichloroethene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
trans-1,3-Dichloropropene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Trichloroethene	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Trichlorofluoromethane	ND	5.00		µg/L	1/20/2011 1:51:00 PM
Vinyl acetate	ND	100		µg/L	1/20/2011 1:51:00 PM
Vinyl chloride	ND	2.00		µg/L	1/20/2011 1:51:00 PM
Surr: 1,2-Dichloroethane d4	95.4	78.2-129		%REC	1/20/2011 1:51:00 PM
Surr: Bromofluorobenzene	101	83-120		%REC	1/20/2011 1:51:00 PM
Surr: Toluene-d8	100	90.3-117		%REC	1/20/2011 1:51:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Client Sample ID: MW-D

Lab Order: 1101019

Tag Number:

Project: Strongsville - H10013-11

Collection Date: 1/14/2011 12:25:00 PM

Lab ID: 1101019-003A

Date Received: 1/19/2011

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
1,1,1,2-Tetrachloroethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,1,1-Trichloroethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,1,2,2-Tetrachloroethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,1,2-Trichloroethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,1-Dichloroethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,1-Dichloroethene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,1-Dichloropropene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2,3-Trichlorobenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2,3-Trichloropropane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2,4-Trichlorobenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2,4-Trimethylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2-Dibromo-3-chloropropane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2-Dibromoethane	ND	2.00		µg/L	1/20/2011 2:28:00 PM
1,2-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2-Dichloroethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,2-Dichloropropane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,3,5-Trimethylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,3-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,3-Dichloropropane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
1,4-Dichlorobenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
2,2-Dichloropropane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
2-Butanone	ND	100		µg/L	1/20/2011 2:28:00 PM
2-Chlorotoluene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
2-Hexanone	ND	100		µg/L	1/20/2011 2:28:00 PM
4-Chlorotoluene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
4-Isopropyltoluene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
4-Methyl-2-pentanone	ND	100		µg/L	1/20/2011 2:28:00 PM
Acetone	ND	100		µg/L	1/20/2011 2:28:00 PM
Benzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Bromobenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Bromochloromethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Bromodichloromethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Bromoform	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Bromomethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Carbon disulfide	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Carbon tetrachloride	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Chlorobenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Chloroethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Chloroform	ND	5.00		µg/L	1/20/2011 2:28:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit



Date: 25-Jan-11

CLIENT:	HZW Environmental Consultants	Client Sample ID:	MW-D
Lab Order:	1101019	Tag Number:	
Project:	Strongsville - H10013-11	Collection Date:	1/14/2011 12:25:00 PM
Lab ID:	1101019-003A	Date Received:	1/19/2011
		Matrix:	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
Chloromethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
cis-1,2-Dichloroethene	683	5.00		µg/L	1/20/2011 2:28:00 PM
cis-1,3-Dichloropropene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Dibromochloromethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Dibromomethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Dichlorodifluoromethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Ethylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Hexachlorobutadiene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Isopropylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
m,p-Xylene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Methyl tert-butyl ether	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Methylene chloride	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Naphthalene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
n-Butylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
n-Propylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
o-Xylene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
sec-Butylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Styrene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
tert-Butylbenzene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Tetrachloroethene	9.81	5.00		µg/L	1/20/2011 2:28:00 PM
Toluene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
trans-1,2-Dichloroethene	18.3	5.00		µg/L	1/20/2011 2:28:00 PM
trans-1,3-Dichloropropene	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Trichloroethene	205	5.00		µg/L	1/20/2011 2:28:00 PM
Trichlorofluoromethane	ND	5.00		µg/L	1/20/2011 2:28:00 PM
Vinyl acetate	ND	100		µg/L	1/20/2011 2:28:00 PM
Vinyl chloride	120	2.00		µg/L	1/20/2011 2:28:00 PM
Surr: 1,2-Dichloroethane d4	95.5	78.2-129		%REC	1/20/2011 2:28:00 PM
Surr: Bromofluorobenzene	100	83-120		%REC	1/20/2011 2:28:00 PM
Surr: Toluene-d8	100	90.3-117		%REC	1/20/2011 2:28:00 PM

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Client Sample ID: MW-E

Lab Order: 1101019

Tag Number:

Project: Strongsville - H10013-11

Collection Date: 1/14/2011 12:20:00 PM

Lab ID: 1101019-004A

Date Received: 1/19/2011

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
1,1,1,2-Tetrachloroethane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,1,1-Trichloroethane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,1,2,2-Tetrachloroethane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,1,2-Trichloroethane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,1-Dichloroethane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,1-Dichloroethene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,1-Dichloropropene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2,3-Trichlorobenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2,3-Trichloropropane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2,4-Trichlorobenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2,4-Trimethylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2-Dibromo-3-chloropropane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2-Dibromoethane	ND	200		µg/L	1/21/2011 9:07:00 PM
1,2-Dichlorobenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2-Dichloroethane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,2-Dichloropropane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,3,5-Trimethylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,3-Dichlorobenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
1,3-Dichloropropane	ND	500		µg/L	1/21/2011 9:07:00 PM
1,4-Dichlorobenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
2,2-Dichloropropane	ND	500		µg/L	1/21/2011 9:07:00 PM
2-Butanone	ND	10000		µg/L	1/21/2011 9:07:00 PM
2-Chlorotoluene	ND	500		µg/L	1/21/2011 9:07:00 PM
2-Hexanone	ND	10000		µg/L	1/21/2011 9:07:00 PM
4-Chlorotoluene	ND	500		µg/L	1/21/2011 9:07:00 PM
4-Isopropyltoluene	ND	500		µg/L	1/21/2011 9:07:00 PM
4-Methyl-2-pentanone	ND	10000		µg/L	1/21/2011 9:07:00 PM
Acetone	ND	10000		µg/L	1/21/2011 9:07:00 PM
Benzene	ND	500		µg/L	1/21/2011 9:07:00 PM
Bromobenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
Bromochloromethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Bromodichloromethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Bromoform	ND	500		µg/L	1/21/2011 9:07:00 PM
Bromomethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Carbon disulfide	ND	500		µg/L	1/21/2011 9:07:00 PM
Carbon tetrachloride	ND	500		µg/L	1/21/2011 9:07:00 PM
Chlorobenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
Chloroethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Chloroform	ND	500		µg/L	1/21/2011 9:07:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit



Date: 25-Jan-11

CLIENT: HZW Environmental Consultants

Client Sample ID: MW-E

Lab Order: 1101019

Tag Number:

Project: Strongsville - H10013-11

Collection Date: 1/14/2011 12:20:00 PM

Lab ID: 1101019-004A

Date Received: 1/19/2011

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		SW8260A		(SW5030A)	Analyst: TM
Chloromethane	ND	500		µg/L	1/21/2011 9:07:00 PM
cis-1,2-Dichloroethene	2300	500		µg/L	1/21/2011 9:07:00 PM
cis-1,3-Dichloropropene	ND	500		µg/L	1/21/2011 9:07:00 PM
Dibromochloromethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Dibromomethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Dichlorodifluoromethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Ethylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
Hexachlorobutadiene	ND	500		µg/L	1/21/2011 9:07:00 PM
Isopropylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
m,p-Xylene	ND	500		µg/L	1/21/2011 9:07:00 PM
Methyl tert-butyl ether	ND	500		µg/L	1/21/2011 9:07:00 PM
Methylene chloride	ND	500		µg/L	1/21/2011 9:07:00 PM
Naphthalene	ND	500		µg/L	1/21/2011 9:07:00 PM
n-Butylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
n-Propylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
o-Xylene	ND	500		µg/L	1/21/2011 9:07:00 PM
sec-Butylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
Styrene	ND	500		µg/L	1/21/2011 9:07:00 PM
tert-Butylbenzene	ND	500		µg/L	1/21/2011 9:07:00 PM
Tetrachloroethene	48600	500		µg/L	1/21/2011 9:07:00 PM
Toluene	ND	500		µg/L	1/21/2011 9:07:00 PM
trans-1,2-Dichloroethene	ND	500		µg/L	1/21/2011 9:07:00 PM
trans-1,3-Dichloropropene	ND	500		µg/L	1/21/2011 9:07:00 PM
Trichloroethene	1670	500		µg/L	1/21/2011 9:07:00 PM
Trichlorofluoromethane	ND	500		µg/L	1/21/2011 9:07:00 PM
Vinyl acetate	ND	10000		µg/L	1/21/2011 9:07:00 PM
Vinyl chloride	314	200		µg/L	1/21/2011 9:07:00 PM
Surr: 1,2-Dichloroethane d4	93.5	78.2-129		%REC	1/21/2011 9:07:00 PM
Surr: Bromofluorobenzene	98.5	83-120		%REC	1/21/2011 9:07:00 PM
Surr: Toluene-d8	98.6	90.3-117		%REC	1/21/2011 9:07:00 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

GEO Analytical, Inc.

Date: 28-Jan-11

CLIENT: HZW Environmental Consultants
Work Order: 1101019
Project: Strongsville - H10013-11

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: MB-10667	SampType: MBLK	TestCode: 8260_W	Units: µg/L	Prep Date: 1/20/2011	RunNo: 15421						
Client ID: ZZZZZ	Batch ID: 10667	TestNo: SW8260A	(SW5030A)	Analysis Date: 1/20/2011	SeqNo: 271390						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.00									
1,1,1-Trichloroethane	ND	5.00									
1,1,2,2-Tetrachloroethane	ND	5.00									
1,1,2-Trichloroethane	ND	5.00									
1,1-Dichloroethane	ND	5.00									
1,1-Dichloroethene	ND	5.00									
1,1-Dichloropropene	ND	5.00									
1,2,3-Trichlorobenzene	ND	5.00									
1,2,3-Trichloropropane	ND	5.00									
1,2,4-Trichlorobenzene	ND	5.00									
1,2,4-Trimethylbenzene	ND	5.00									
1,2-Dibromo-3-chloropropane	ND	5.00									
1,2-Dibromoethane	ND	2.00									
1,2-Dichlorobenzene	ND	5.00									
1,2-Dichloroethane	ND	5.00									
1,2-Dichloropropane	ND	5.00									
1,3,5-Trimethylbenzene	ND	5.00									
1,3-Dichlorobenzene	ND	5.00									
1,3-Dichloropropane	ND	5.00									
1,4-Dichlorobenzene	ND	5.00									
2,2-Dichloropropane	ND	5.00									
2-Butanone	ND	100									
2-Chlorotoluene	ND	5.00									
2-Hexanone	ND	100									
4-Chlorotoluene	ND	5.00									
4-Isopropyltoluene	ND	5.00									
4-Methyl-2-pentanone	ND	100									
Acetone	ND	100									
Benzene	ND	5.00									

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H: Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: HZW Environmental Consultants
Work Order: 1101019
Project: Strongsville - H10013-11

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: MB-10667	SampType: MBLK	TestCode: 8260_W	Units: µg/L	Prep Date: 1/20/2011	RunNo: 15421						
Client ID: ZZZZ	Batch ID: 10667	TestNo: SW8260A	(SW5030A)	Analysis Date: 1/20/2011	SeqNo: 271390						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	5.00									
Bromochloromethane	ND	5.00									
Bromodichloromethane	ND	5.00									
Bromoform	ND	5.00									
Bromomethane	ND	5.00									
Carbon disulfide	ND	5.00									
Carbon tetrachloride	ND	5.00									
Chlorobenzene	ND	5.00									
Chloroethane	ND	5.00									
Chloroform	ND	5.00									
Chloromethane	ND	5.00									
cis-1,2-Dichloroethene	ND	5.00									
cis-1,3-Dichloropropene	ND	5.00									
Dibromochloromethane	ND	5.00									
Dibromomethane	ND	5.00									
Dichlorodifluoromethane	ND	5.00									
Ethylbenzene	ND	5.00									
Hexachlorobutadiene	ND	5.00									
Isopropylbenzene	ND	5.00									
m,p-Xylene	ND	5.00									
Methyl tert-butyl ether	ND	5.00									
Methylene chloride	ND	5.00									
Naphthalene	ND	5.00									
n-Butylbenzene	ND	5.00									
n-Propylbenzene	ND	5.00									
o-Xylene	ND	5.00									
sec-Butylbenzene	ND	5.00									
Styrene	ND	5.00									
tert-Butylbenzene	ND	5.00									
Tetrachloroethene	ND	5.00									
Toluene	ND	5.00									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: HZW Environmental Consultants
Work Order: 1101019
Project: Strongsville - H10013-11

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: MB-10667	SampType: MBLK	TestCode: 8260_W	Units: µg/L	Prep Date: 1/20/2011	RunNo: 15421						
Client ID: ZZZZZ	Batch ID: 10667	TestNo: SW8260A	(SW5030A)	Analysis Date: 1/20/2011	SeqNo: 271390						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

trans-1,2-Dichloroethene	ND	5.00									
trans-1,3-Dichloropropene	ND	5.00									
Trichloroethene	ND	5.00									
Trichlorofluoromethane	ND	5.00									
Vinyl acetate	ND	100									
Vinyl chloride	ND	2.00									
Surr: 1,2-Dichloroethane d4	38.30	5.00	40	0	95.7	78.2	129				
Surr: Bromofluorobenzene	39.42	5.00	40	0	98.5	83	120				
Surr: Toluene-d8	40.42	5.00	40	0	101	90.3	117				

Sample ID: LCS-10667	SampType: LCS	TestCode: 8260_W	Units: µg/L	Prep Date: 1/20/2011	RunNo: 15421						
Client ID: ZZZZZ	Batch ID: 10667	TestNo: SW8260A	(SW5030A)	Analysis Date: 1/20/2011	SeqNo: 271391						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	45.66	5.00	40	0	114	72.8	122				
Benzene	41.53	5.00	40	0	104	82.5	116				
Chlorobenzene	43.27	5.00	40	0	108	87.1	120				
Toluene	39.53	5.00	40	0	98.8	84.9	118				
Trichloroethene	42.47	5.00	40	0	106	80.9	122				
Surr: 1,2-Dichloroethane d4	39.04	5.00	40	0	97.6	78.2	129				
Surr: Bromofluorobenzene	41.50	5.00	40	0	104	83	120				
Surr: Toluene-d8	39.46	5.00	40	0	98.7	90.3	117				

Sample ID: 1101019-001AMS	SampType: MS	TestCode: 8260_W	Units: µg/L	Prep Date: 1/20/2011	RunNo: 15421						
Client ID: MW-B	Batch ID: 10667	TestNo: SW8260A	(SW5030A)	Analysis Date: 1/20/2011	SeqNo: 271395						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	55.85	5.00	46.5	0	120	63	145				
Benzene	50.44	5.00	46.5	0	108	69	141				
Chlorobenzene	52.42	5.00	46.5	0.186	112	71.3	140				

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

CLIENT: HZW Environmental Consultants
Work Order: 1101019
Project: Strongsville - H10013-11

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: 1101019-001AMS	SampType: MS	TestCode: 8260_W	Units: µg/L	Prep Date: 1/20/2011	RunNo: 15421						
Client ID: MW-B	Batch ID: 10667	TestNo: SW8260A	(SW5030A)	Analysis Date: 1/20/2011	SeqNo: 271395						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	49.68	5.00	46.5	0	107	67.7	138				
Trichloroethene	51.88	5.00	46.5	0	112	67.1	146				
Surr: 1,2-Dichloroethane d4	39.41	5.00	40	0	98.5	78.2	129				
Surr: Bromofluorobenzene	41.93	5.00	40	0	105	83	120				
Surr: Toluene-d8	40.13	5.00	40	0	100	90.3	117				

Sample ID: 1101019-001AMSD	SampType: MSD	TestCode: 8260_W	Units: µg/L	Prep Date: 1/20/2011	RunNo: 15421						
Client ID: MW-B	Batch ID: 10667	TestNo: SW8260A	(SW5030A)	Analysis Date: 1/20/2011	SeqNo: 271396						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	55.29	5.00	46.5	0	119	63	145	55.85	0.999	20	
Benzene	50.62	5.00	46.5	0	109	69	141	50.44	0.364	20	
Chlorobenzene	51.04	5.00	46.5	0.186	109	71.3	140	52.42	2.66	20	
Toluene	48.36	5.00	46.5	0	104	67.7	138	49.68	2.70	20	
Trichloroethene	49.91	5.00	46.5	0	107	67.1	146	51.88	3.86	20	
Surr: 1,2-Dichloroethane d4	39.78	5.00	40	0	99.5	78.2	129	0	0	0	
Surr: Bromofluorobenzene	40.69	5.00	40	0	102	83	120	0	0	0	
Surr: Toluene-d8	40.40	5.00	40	0	101	90.3	117	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: HZW Environmental Consultants

Work Order: 1101019

Project: Strongsville - H10013-11

Test Code: 8260_W

Matrix: W

**QC SUMMARY REPORT
SURROGATE RECOVERIES**

Sample ID	BR2FBZ	BZMED8	DCAD4					
1101019-001A	99.3	101	96.7					
1101019-001AMS	105	100	98.5					
1101019-001AMSD	102	101	99.5					
1101019-002A	101	100	95.4					
1101019-003A	100	100	95.5					
1101019-004A	98.5	98.6	93.5					
LCS-10667	104	98.7	97.6					
MB-10667	98.5	101	95.7					

Acronym	Surrogate	QC Limits
BR2FBZ	= Bromofluorobenzene	83-120
BZMED8	= Toluene-d8	90.3-117
DCAD4	= 1,2-Dichloroethane d4	78.2-129

* Surrogate recovery outside acceptance limits

9263 Ravenna Rd. Suite A-7
Twinsburg, OH 44087
Phone Number 330 963 6990
Fax Number 330 963 6975
customerservice@geoanalytical.



**COMPANY
NAME AND
ADDRESS**

H2W Environmental

SAMPLER SIGNATURES: Tom Fuhrman

SAMPLER SIGNATURES:

STA.#	DATE	TIME	OMP.	RAB.	STATION LOCATION
-------	------	------	------	------	------------------

COMP.	GRAB.
-------	-------

STATION LOCATIONCOM
GRA

TIME

STA.#

1-4-11 19:20

rw-13

13:55

rain-C

57.61

MW-D

09.81

MW-E

CHAIN OF CUSTODY RECORD

6/10/09

**COMPANY
NAME AND
ADDRESS**

PROJECT: Strongsville - H10013-11

SAMPLER SIGNATURES:

Analysis Requested

VAP

3

NOTES

CHAIN OF CUSTODY SIGNATURES (Name, Company, Date, Time)

1. Relinquished By: [Signature] 1-19-11 9:20

Received By: _____

3. Relinquished By:

Received By: _____

2. Relinquished By:

Received By:

4. Submitted to Laboratory By: _____

Received for Laboratory By:

COOLER TEMP
ON RECEIPT